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Water Supply Outlook For Idaho

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
JAN. 1, 1980

USDA SCS-PORTLAND OR 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES OFTEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

R.M. DAVIS
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR JANUARY 1, 1980

Snow surveys made near January 1, 1980 indicate that drought conditions which started with the severe shortage in 1977 continue to persist throughout Idaho. Snow accumulation is below to well below average throughout the State, ranging from 42 percent of normal on the Montpelier Creek drainage in southeastern Idaho to 99 percent of average on the Bruneau River watershed in southern Idaho and northern Nevada. One exception to this deficiency is the Jordan Creek area on the Owyhee River drainage in southwestern Idaho which has a snow accumulation well in excess of normal.

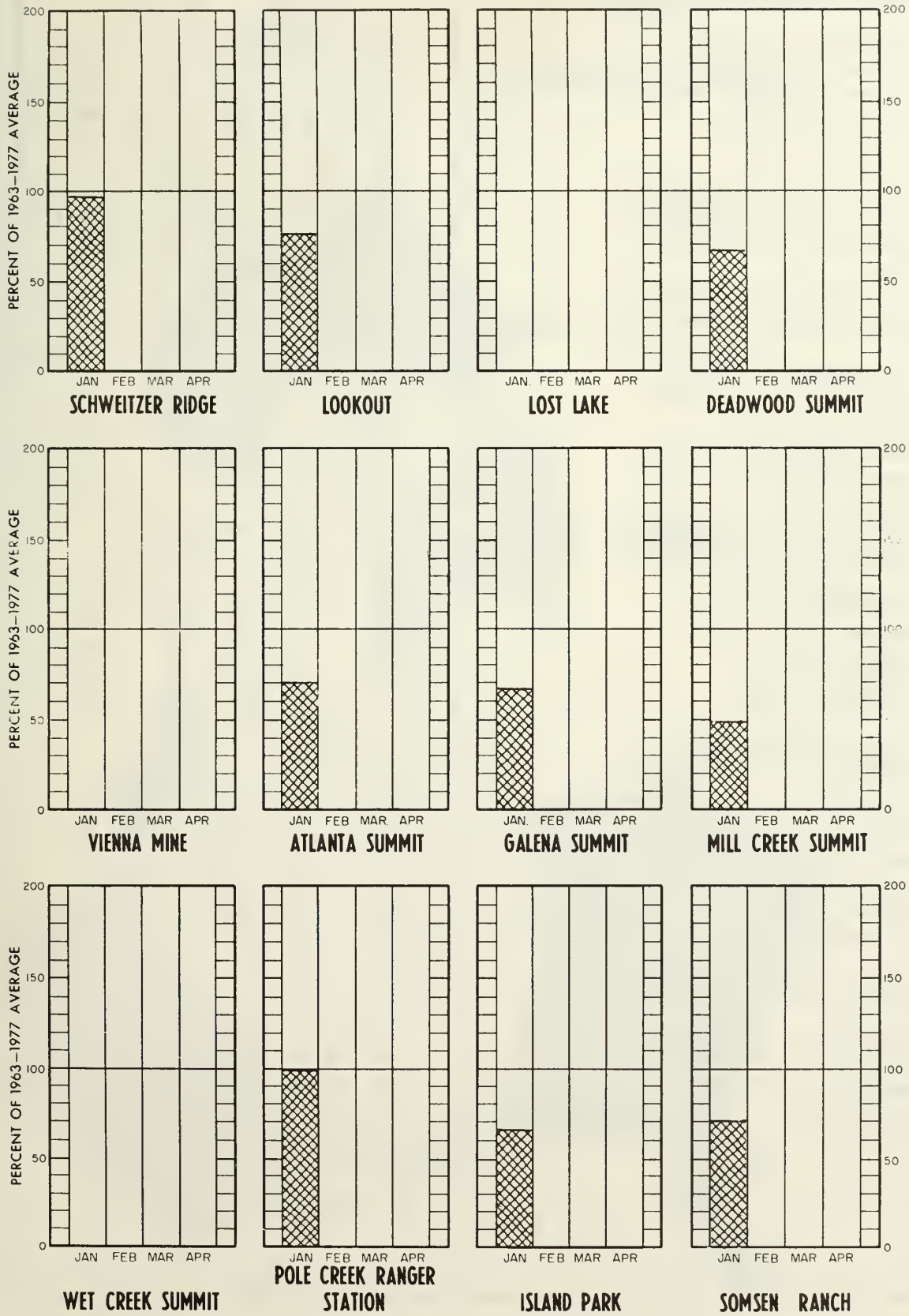
Based on present snow cover conditions the outlook for water supplies for the 1980 season indicates possible shortages throughout the State. The serious shortage of snow accumulation is further aggravated by deficient soil moisture, due to a very dry fall season, and very low carryover stored water in the reservoirs. A combination of sixteen irrigation reservoirs in the Snake River system which normally would be near 70 percent of capacity on the first of January contain only 45 percent of capacity on January 1, 1980.

The National Weather Service reports that precipitation averaged well below normal for December in Idaho, while the temperature averaged above normal.

The precipitation averaged only 70 percent with a range from 111 percent at Porthill to a low of 11 percent at Grace. For the water year the State stands 75 percent of normal. Temperatures averaged 2° F. above normal in the southern portion of Idaho to 6° F. above in the northern portion of the State.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

JANUARY 1, 1980



COMPARISON of SNOW COVER

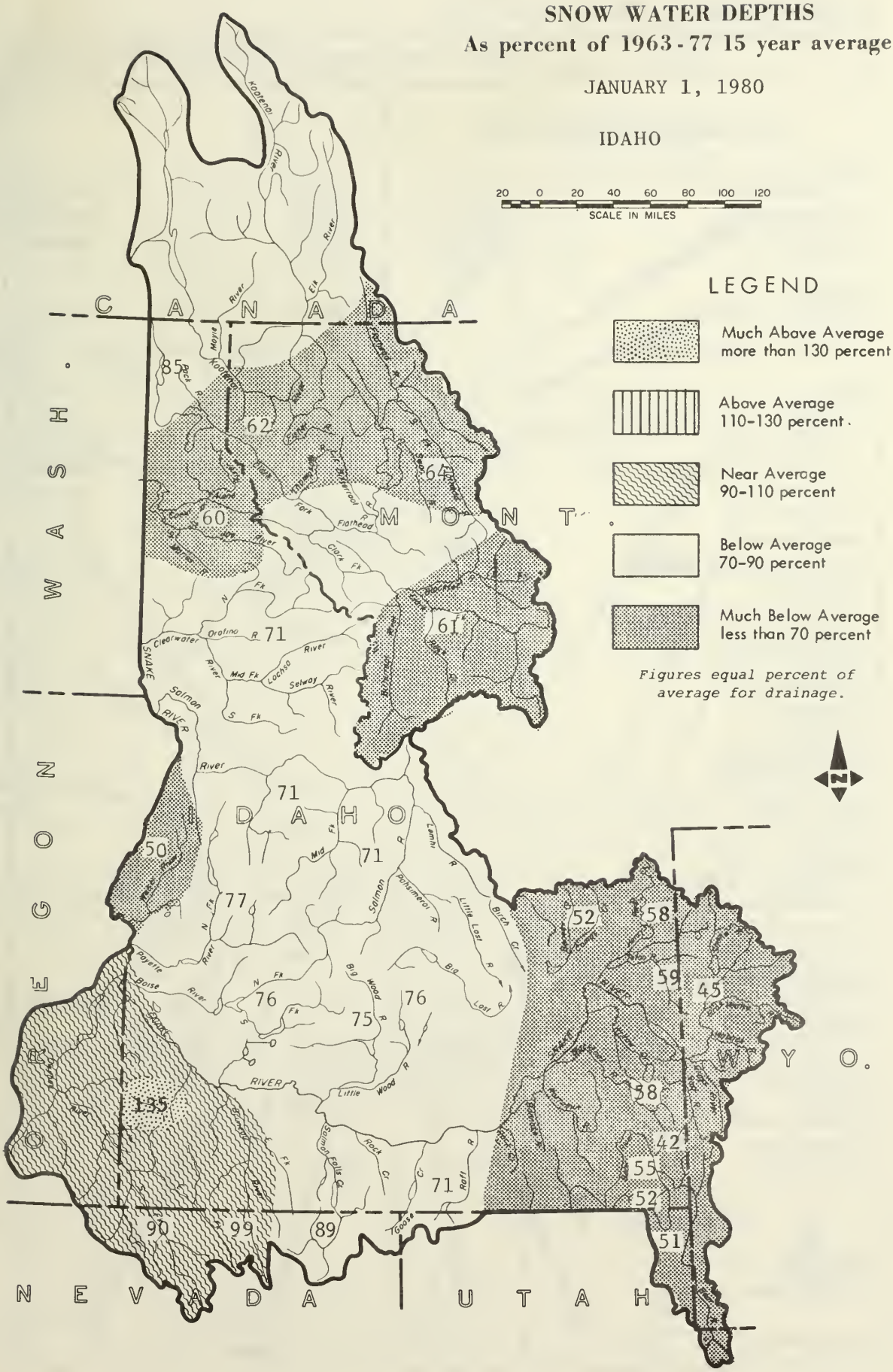
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF: LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Pend Oreille River	56	56	62
Clark Fork River	42	51	61
Flathead River	14	70	64
Priest River	4	160	85
Spokane River	3-5	70	60
LOWER SNAKE RIVER BASIN			
Clearwater River	10-13	74	71
Salmon River	12-14	118	71
MIDDLE SNAKE RIVER BASIN - Northside			
Big Lost River	5	126	--
Little Wood River	3-4	188	76
Big Wood River	7-10	157	75
Boise River	10-12	141	76
Payette River	12-13	132	77
Weiser River	1	98	50
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	1	117	71
Salmon Falls Creek	4	98	89
Bruneau River	1	111	99
Owyhee River	4	90	90
Jordan Creek	2	150	135
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Res.	9	50	45
Camas-Beaver Creeks	2	77	52
Henrys Fork River	7	69	58
Teton River	4-7	68	59
Willow Creek	9	70	--
Blackfoot River	2	52	58
GREAT BASIN			
Bear River - Upper	2-4	45	51
Bear River - Lower	11	43	51
Montpelier Creek	5	40	42
Mink Creek	1	48	55
Cub River	3	47	52

SNOW WATER DEPTHS

As percent of 1963-77 15 year average

JANUARY 1, 1980

IDAHO



RESERVOIR STORAGE (1,000 Ac. Ft.)

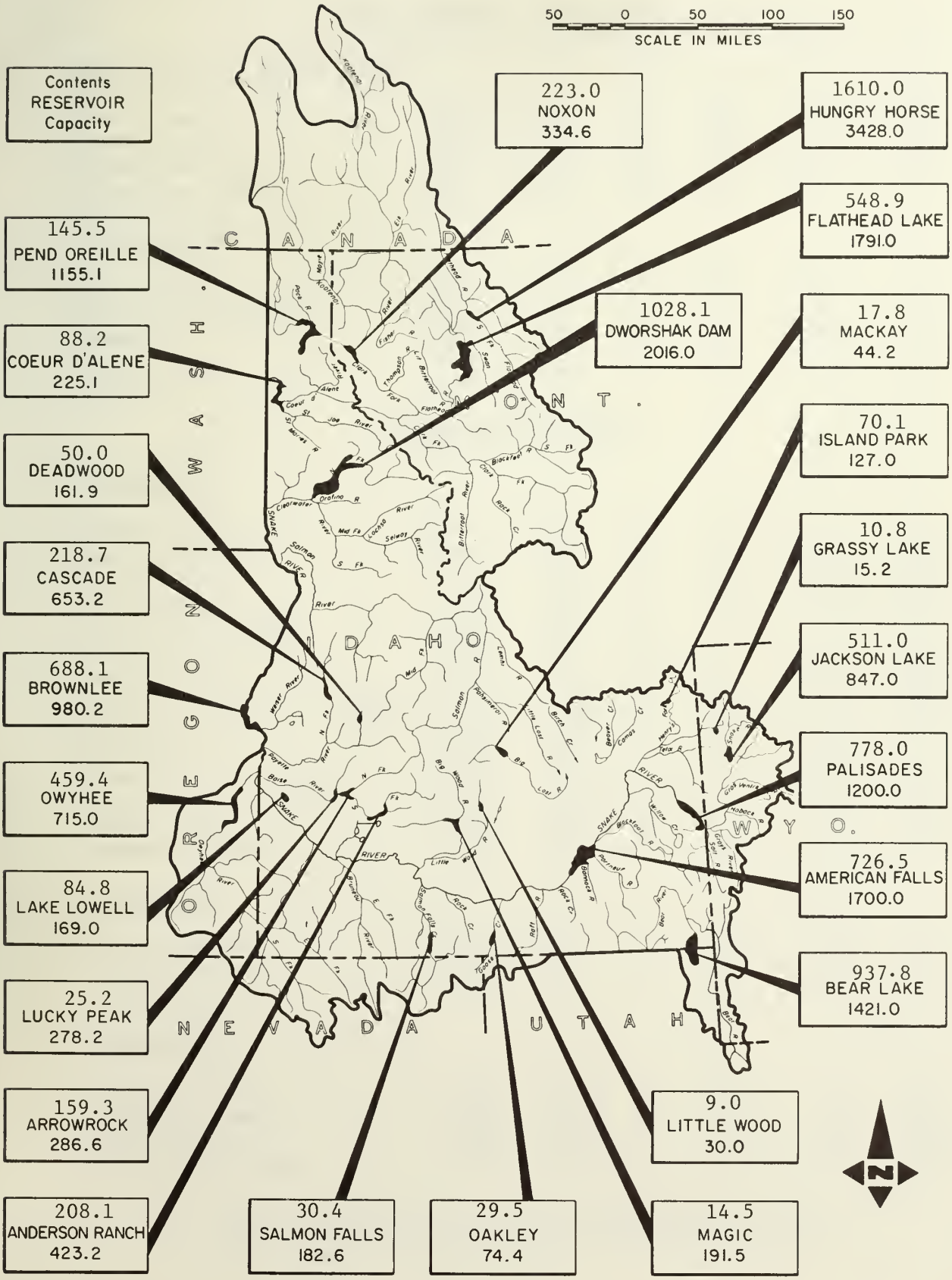
RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	1610.0	2478.0	2624.0
Flathead	1791.0	548.9	1151.0	1428.0
Pend Oreille	1155.1	145.5	158.5	730.8
Noxon	334.6	223.0	282.2	318.7
Spokane				
Coeur d'Alene	225.1	88.2	46.8	143.3
SNAKE BASIN				
Snake				
Jackson Lake	847.0	511.0	566.8	599.7
Palisades	1200.0	778.0	1132.7	1098.8
American Falls	1700.0	726.5	1120.6	1019.3
Island Park	127.0	70.1	110.9	92.4
Grassy Lake	15.2	10.8	--	10.1
Brownlee	980.2	688.1	700.5	1254.5
Goose-Trapper Creeks				
Oakley	74.4	29.5	29.8	23.5
Salmon Falls Creek				
Salmon Falls	182.6	30.4	28.9	39.2
Big Lost				
Mackay	44.2	17.8	33.7	26.7
Big Wood				
Magic	191.5	14.5	110.0	98.4
Little Wood				
Little Wood	30.0	9.0	17.0	14.0
Fish Creek				
Carey Valley	14.4	2.0*	4.7	--
Boise				
Anderson Ranch	423.2	208.1	345.3	342.1
Arrowrock	286.6	159.3	178.8	216.8
Lucky Peak	278.2	25.2	68.9	81.9
Lake Lowell (Deer Flat)	169.0	84.8	127.9	124.1
Owyhee				
Owyhee	715.0	459.4	451.8	812.3
Payette				
Cascade	653.2	218.7	415.8	429.0
Deadwood	161.9	50.0	75.4	74.3
Weiser				
Mann Creek	11.1	2.1	3.1	--
Clearwater				
Dworshak	2016.0	1028.1	771.0	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	937.8	978.9	971.8

*Estimated

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JANUARY 1, 1980



SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]
UPPER COLUMBIA RIVER BASIN						
PEND OREILLE - PRIEST RIVER						
Benton Meadow	2370	1/2	6	1.1	1.7	2.9
Benton Spring	4900	1/2	24	5.9	3.1	8.3
Schweitzer Bowl	4500	1/3	39	11.0	6.8	13.0*
Schweitzer Ridge	6200	1/3	60	19.7	11.9	20.3*
SPOKANE RIVER						
Above Burke	4100	12/31	21	5.0	11.0	9.3*
#Forty-nine Meadows	4840	12/27	34	7.0	10.0	--
Lookout	5120	12/31	36	10.4	11.2	13.7
#Lost Lake	6080	12/27	64	16.0	17.3	--
Sherwin	3200	12/30	6	1.8	8.0	5.5*
LOWER SNAKE RIVER BASIN						
CLEARWATER						
Breezy Saddle	5000	12/27	34	6.8	10.1	--
Cayuse Airstrip	3500	12/27	11	1.8	6.8	5.1*
Crater Meadows	6100	12/27	55	14.0	15.3	18.3*
Crooked Fork	3600	12/27	11	2.0	6.9	5.1*
Fish Lake Airstrip	5650	12/27	49	11.7	16.1	16.1*
Forty-nine Meadows	4840	12/27	34	7.0	10.0	--
Hemlock Butte	5500	12/27	55	13.5	15.2	20.8*
#Hoodoo Basin Mont.	6000	12/26	64	18.8	20.2	22.3*
#Hoodoo Creek Mont.	5900	12/26	55	14.8	17.9	18.8*
Lolo Pass	5240	12/27	34	8.8	14.8	11.5*
Lost Lake	6080	12/27	64	16.0	17.3	--
Pierce Ranger Station	3170	Not measured			6.8	4.2
Savage Pass	6170	12/27	33	7.7	12.4	10.2*
Shanghai Summit	4600	12/27	25	5.0	11.1	9.9*
WEBB CREEK						
Kruse Meadows	4800	1/2	0	0.0	7.0	--
Soldier Meadow	4640	1/2	0	0.0	7.0	--
Webb Creek	4720	1/2	0	0.0	6.7	--
SALMON RIVER						
#Banner Summit	7040	12/26	47	10.1	7.2	--
Big Creek Summit	6600	12/27	48	11.8	9.6	14.7
#Boulder Creek	5500	12/28	26	5.1	5.2	10.2
Brundage Mountain	7560	12/27	61	19.5	12.0	18.9*

(b)1963-77, 15 year period. #Not located directly on this drainage. [1] Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average
#Deadwood Summit		6750	12/26	60	15.2	9.8	22.7*
#Galena Summit		8780	12/26	39	6.9	5.8	10.4
#Gibbons Pass	Mont.	7100	12/26	26	5.8	8.9	9.1
Mill Creek Summit		8800	12/27	30	6.5	5.5	13.3*
Moose Creek		6200	12/31	17	3.2	6.6	6.9*
Morgan Creek		7580	12/28	19	3.8	4.7	2.6*
#Rock Flat Summit		5340	12/27	28	6.0	5.8	7.1
#Secesh Summit		6520	12/28	43	10.5	8.7	16.6*
#Squaw Meadow		5900	12/28	46	11.8	8.7	16.8*
Vienna Mine		8950	12/27	48	10.4	9.0	--
MIDDLE SNAKE RIVER BASIN - NORTHSIDE							
BIG LOST RIVER							
Bear Canyon		7920	12/27	28	4.0	3.1	--
Copper Basin		7650	12/27	5	0.5	1.2	--
Fishpole Lake		9350	12/27	24	5.5	4.2	--
Lost-Wood Divide		7900	12/27	31	6.4	4.3	--
Stickney Mill		7450	12/27	17	2.3	2.0	--
LITTLE WOOD RIVER							
#Bear Canyon		7920	12/27	28	4.0	3.1	--
Garfield Ranger Station		6560	1/2	16	4.0	1.5	4.1*
Muldoon		6300	1/2	14	3.0	1.2	3.2*
Swede Peak		7640	1/2	24	5.0	2.7	8.4*
BIG WOOD RIVER							
#Couch Summit		6850	12/31	31	5.6	2.8	7.2*
Dollarhide Summit		8400	12/27	36	7.6	5.0	12.4*
Galena		7300	12/26	36	6.1	3.4	7.8
Galena Summit		8780	12/26	39	6.9	5.8	10.4
Graham Ranch		6280	12/26	30	4.1	2.7	5.6
#Lost-Wood Divide		7900	12/27	31	6.4	4.3	--
Mascot Mine		7760	12/27	24	4.5	2.7	--
Mount Baldy		9000	1/1	40	6.8	3.0	8.7*
Soldier Ranger Station		6100	12/31	24	5.5	1.9	4.9*
#Vienna Mine		8950	12/27	48	10.4	9.0	--
BOISE RIVER							
Atlanta Summit		7500	12/27	50	10.7	6.9	15.2*
Bad Bear		5500	12/28	21	4.2	4.4	5.2*
#Bogus Basin		6340	12/28	33	8.3	5.2	9.6
Bogus Basin Road		5520	12/28	10	2.0	2.8	2.9*
Couch Summit		6850	12/31	31	5.6	2.8	7.2*

*(b) 1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average 4/
#Dollarhide Summit	8400	12/27	36	7.6	5.6	12.4*
Graham Guard Station	5690	12/27	23	5.0	4.0	--
Jackson Peak	7070	12/26	44	9.4	7.5	15.1*
Moores Creek Summit	6100	12/28	38	9.2	7.0	13.0
#Soldier Ranger Station	6100	12/31	24	5.5	1.9	4.9*
Trinity Mountain	7780	12/27	53	13.5	8.4	15.6*
#Vienna Mine	8950	12/27	48	10.4	9.0	--
PAYETTE RIVER						
Banner Summit	7040	12/26	47	10.1	7.2	--
#Big Creek Summit	6600	12/27	48	11.8	9.6	14.7
Bogus Basin	6340	12/28	33	8.3	5.2	9.6
#Brundage Mountain	7560	12/27	61	19.5	12.0	18.9*
Cozy Cove	5400	12/26	31	6.0	4.8	7.0
Crawford Ranger Station	4800	12/27	21	3.3	2.0	3.0*
Deadwood Airstrip	5440	12/26	31	5.5	4.8	6.3*
Deadwood Summit	7000	12/26	60	15.2	9.8	22.7*
#Jackson Peak	7070	12/26	44	9.4	7.5	15.1*
Lake Fork	6000	12/28	21	4.3	6.1	6.5*
Rock Flat Summit	5340	12/27	28	6.0	5.8	7.1
Secesh Summit	6520	12/28	43	10.5	8.7	16.6*
Squaw Meadow	5900	12/28	46	11.8	8.7	16.8*
WEISER RIVER						
Boulder Creek	5500	12/28	26	5.1	5.2	10.2
MIDDLE SNAKE RIVER BASIN - SOUTHSIDE						
RAFT RIVER						
Howell Canyon	7980	12/31	26	7.5	6.4	10.5
SALMON FALLS CREEK						
Deadline	6900	12/30	26	7.6	9.6	8.7*
Goat Creek Nev.	8800	12/29	25	6.6	5.6	7.8*
Magic Mountain	6700	12/30	22	6.3	6.9	7.5*
#Pole Creek Rgr. Sta. Nev.	8330	12/29	29	9.0	8.1	9.1*
BRUNEAU RIVER						
Pole Creek Rgr. Sta. Nev.	8330	12/29	29	9.0	8.1	9.1*
OWYHEE RIVER						
South Mountain	6340	12/29	21	6.6	4.6	5.2

(b)1963-77, 15 year period. #Not located directly on this drainage. 4/ Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average [1]
UPPER SNAKE RIVER BASIN							
CAMAS-BEAVER CREEKS							
Camp Creek		6800	12/31	14	2.2	3.2	4.8
Kilgore		6200	12/29	16	2.6	3.0	4.5
HENRYS FORK RIVER							
Big Springs		6400	1/2	21	3.9	7.6	7.8
Grassy Lake	Wyo.	7230	12/26	34	7.1	15.8	14.4
Island Park		6290	1/2	20	4.0	6.5	6.2
Sawtell Mountain		8720	1/2	39	10.6	8.5	14.1*
Targhee Pass		7000	1/2	18	2.7	4.3	6.2*
Valley View		6740	1/2	18	2.8	5.0	6.4
White Elephant		7700	1/2	28	6.3	6.6	8.9*
TETON RIVER							
Darby Canyon	Wyo.	8250	1/3	28	6.0	10.0	9.5*
Freds Mountain	Wyo.	8150	12/27	27	6.0	9.2	8.6*
Indian Meadows	Wyo.	8240	12/28	41	11.0	14.1	--
Jackpine Creek	Wyo.	7350	12/28	23	5.2	8.8	--
McRenolds Reservoir		6800	12/28	23	4.6	9.0	--
Pine Creek Pass		6750	12/27	17	3.3	7.0	6.9
State Line		6650	12/27	17	3.0	8.6	5.9
WILLOW CREEK							
Aspen Grove		6500	1/26	19	4.1	4.0	--
Birch Creek		6800	1/26	16	3.0	4.0	--
Blue Ridge		6800	1/27	20	4.0	5.7	--
Bone		6200	1/27	7	0.9	2.6	3.0*
Brockman Station		6430	1/27	15	2.6	4.2	--
Hell Creek		7100	1/27	15	3.2	6.0	--
Mud Creek		7150	1/27	19	3.7	3.0	--
Sheep Mountain		6570	1/27	15	2.7	5.5	--
Tex Creek		6650	1/26	17	3.0	3.8	--
BLACKFOOT RIVER							
Slug Creek Divide		7230	12/26	18	3.7	6.9	7.5*
Somsen Ranch		7000	12/27	18	4.0	7.9	5.7*
GREAT BASIN							
BEAR RIVER							
Emigrant Summit		7380	12/27	24	5.2	10.8	9.4*

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1965-77, 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent (K) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]
MONTPELIER CREEK						
Giveout	6840	12/26	13	2.3	5.7	4.8
Little Beaver	6970	12/26	11	2.0	7.5	5.7
Montpelier Creek	6570	12/26	8	1.4	2.5	3.4
Whiskey Flat	6960	12/26	8	1.2	4.1	3.6
MINK CREEK						
#Emigrant Summit	7380	12/27	24	5.2	10.8	9.4*
CUB RIVER						
Cub River Rgr. Sta.	5400	12/27	13	2.5	3.6	3.4*
#Franklin Basin	8000	12/27	21	4.1	9.7	9.9*
Willow Flat	6100	12/27	16	3.4	8.1	5.9*

*(b)1963-77, 15 year period #Not located directly on this drainage * Estimated 1963-77 15 year Average (A) Aerial observation Water content estimated (SP) Pressure Pillow snow water equivalent (R) Radioactive Gage snow-water equivalent*

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service

U.S. Department of Commerce
NOAA, National Weather Service

U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ROOM 345
304 N. 8TH ST.
BOISE, IDAHO 83702

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
FEB. 1, 1980

USDA SCS PORTLAND OR 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultont average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountoin oreas. A totol of obout ten samples ore taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the some location near the same dates each year.

Snow surveys ore made monthly or semi-monthly from January 1 through June 1 in most states. There are obout 1900 snow courses in Western United States ond in the Columbia Basin in British Columbia. Networks of outomotic snow woter equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key lacations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idoho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Woshington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL STATEMENT FOR FEBRUARY 1, 1980

Based on February 1 snow measurements, the outlook is for fair to good water supplies during the 1980 season.

Heavy snowfall and precipitation during the month of January has brightened the outlook for an improved spring runoff. Drought conditions prevailing statewide the first of the year have been significantly diminished by greatly increased snow accumulation on most watersheds in Idaho. Though improved, well below normal runoff is still in prospect for the Weiser, Clearwater and Spokane Rivers.

February 1st snow surveys show that the water content in the snow pack ranges from a low of 62% of normal on the Weiser River drainage to a high of 117% of average on the Blackfoot and Portneuf river watersheds. Seasonal streamflow forecasts range from a low of 70% of normal for the Spokane River at Post Falls to 104% of average for Montpelier Creek in southeastern Idaho.

The soil mantle at middle and high elevations is still dry and unfrozen and is expected to absorb a considerable amount of moisture when snowmelt starts.

Reservoir storage continues to be well below average statewide and will not change appreciably until the spring runoff.

Precipitation reported by the National Weather Service averaged well above normal for January in Idaho with most of the moisture coming in the first half of the month. The precipitation averaged 142% with a range from 95% at Porthill to 309% at Pocatello. For the water year the State stands at 95% of normal. Temperature averages ranged from 2° F. in southern Idaho to nearly 5° F. below normal in northern Idaho.

If normal precipitation continues, there should be sufficient runoff to supply the water needs of Idaho for the 1980 season.

Upper Columbia River Tributaries: Snow water accumulation on the Priest River and Spokane River watersheds stand at 97% and 67% of average respectively. Near normal runoff is forecast for the Priest River at 89% of average; however the Spokane is forecast for well below normal at 70%. Coeur d'Alene Lake, though very low at 38% of average, is expected to fill.

Lower Snake River Tributaries: The snowpack on the Clearwater watershed continues to be well below normal at 64% with April-September runoff forecast to be down at 71% of average. Dworshak Reservoir storage was only 23% of capacity on February 1. Snow cover on the Salmon drainage as a whole is 96% of average. The snowpack is extremely variable with the tributaries as follows: Lemhi, Pahsimeroi and Main stem below Challis 72%; Main stem above Challis 102%; Middle and South Forks 97%; and Little Salmon 79%. April-September flow at Whitebird is forecast to be 83% of average.

Middle Snake River - Northside Tributaries: Snow cover on the Lost, Wood, Boise and Payette watersheds is 98% of normal, varying from 87% on the Little Lost to 105% on the Little Wood. The Weiser River drainage has a very deficient snowpack at 62% of average. Runoff is forecast at 80-85% on the Lost Rivers, near 90% on the Wood Rivers and 90-100% on the Payette and Boise drainages. A combination of nine reservoirs on these drainages show water storage at 83% of average on February 1. Magic reservoir is very low at only 18% of normal storage and filling will depend on how runoff occurs and necessity of early season irrigation demands.

Middle Snake River Southern Tributaries: The water content of the snow pack on the Raft River is 96% of average, 107% on the Goose, Trapper and Salmon Falls watersheds, 103% on the Bruneau and 102% on the Owyhee drainages. Seasonal runoff is forecast at 83% and 84% of normal for the Oakley Reservoir Inflow and Bruneau River respectively, 93% for Salmon Falls Creek and 94% for Lake Owyhee Inflow. Reservoir contents are 118% of average for Oakley Reservoir, 77% for Salmon Falls and 117% for Owyhee Reservoir.

Upper Snake River Basin: Snow cover in the Snake Basin above Palisades, Henry's Fork and Teton River watersheds is near 82% of average, Willow Creek drainage is at 103%, and the brightest area of the state at 117% on the Blackfoot and Portneuf Rivers. Runoff is forecast at 75% for Snake at Heise, 71% for Henry's Fork and 93% for the Portneuf at Topaz. A combination of the five reservoirs, American Falls and above, have 90% of average storage and can be expected to fill.

Great Basin: The snowpack is 116% of normal on the Upper Bear River, 110% on Montpelier Creek, 96% on Mink Creek and 102% of average on the Cub River watershed. Runoff is forecast at 91% for Bear River at Harer, 100% for Cub River and 104% for Montpelier Creek near Montpelier. Bear Lake has 95% of average stored water.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter January 1980		Fall - Winter Oct. 1979 - Jan. 1980	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	2.25	-1.23	9.19	-2.61
Flathead	3.39	+ .54	7.49	-1.72
Clark Fork	2.25	-1.23	5.05	-1.75
Pend Oreille-Spokane	3.85	- .57	11.02	-3.52
Upper Snake	3.23	+ .60	7.36	- .78
Snake River Plain	2.30	+1.07	4.75	+ .69
Salmon-Payette-Boise	3.31	+ .01	8.56	-1.09
Clearwater	3.61	-1.13	11.20	-3.68
Owyhee-Malheur	1.35	- .13	4.58	- .13

1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Departure from 15-year (1963-77) drainage division average.

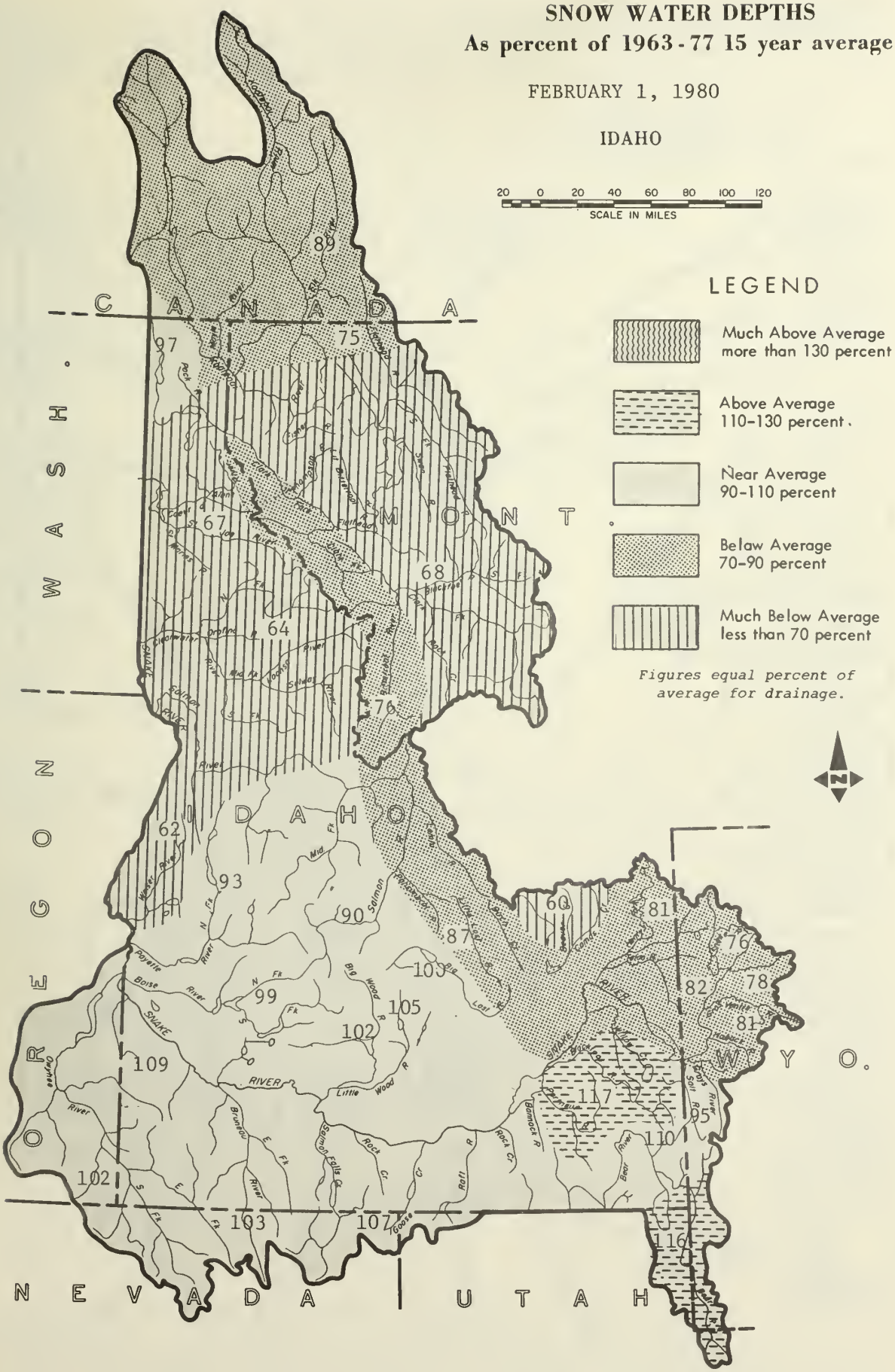
COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF : LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	27	167	89
Pend Oreille River	63	90	75
Upper Clark Fork River	28	68	68
Flathead River	20	102	75
Priest River	4	208	97
Spokane River	5	96	67
LOWER SNAKE RIVER BASIN			
Clearwater River	11	89	64
Salmon River	13	179	96
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	1-2	186	87
Big Lost River	4-5	238	100
Little Wood River	4	269	105
Big Wood River	14	228	102
Boise River	12-13	187	99
Payette River	12	181	93
Weiser River	1	118	62
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	1	132	96
Goose-Trapper Creek	3	111	107
Salmon Falls Creek	5	116	107
Bruneau River	3	132	103
Owyhee River	6	85	102
Jordan Creek	1	104	109
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Res.	27	78	82
Camas-Beaver Creeks	2	91	60
Henrys Fork River	7	102	81
Teton River	8	75	82
Willow Creek	5-9	110	103
Blackfoot River	3	103	117
Portneuf River	4	119	117
GREAT BASIN			
Bear River - Upper	5	110	116
Bear River - Lower	14	92	109
Montpelier Creek	6	112	110
Mink Creek	1-2	93	96
Cub River	3	86	102

SNOW WATER DEPTHS
As percent of 1963-77 15 year average

FEBRUARY 1, 1980

IDAHO



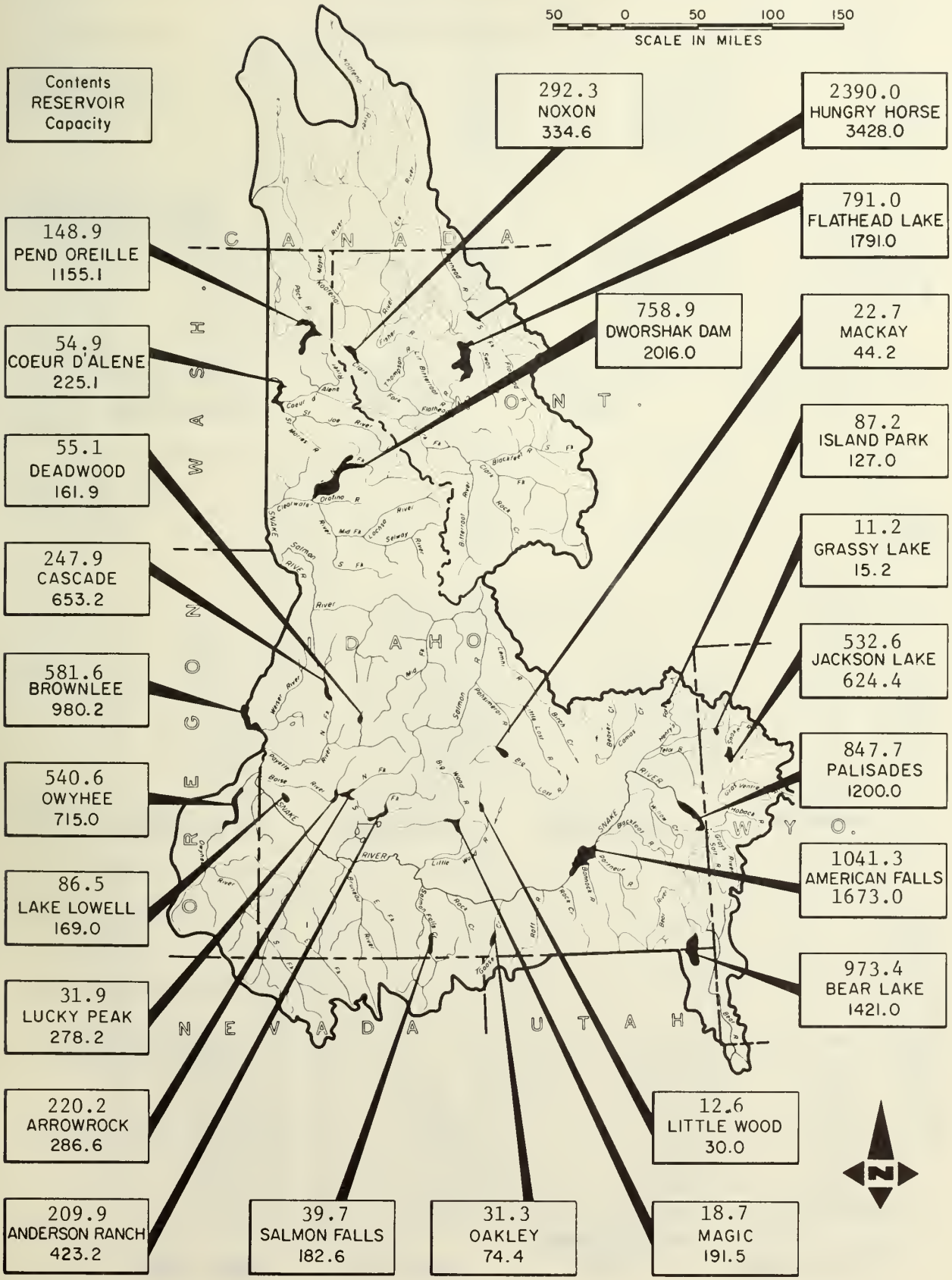
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2390.0	2215.0	2341.0
Flathead	1791.0	791.0	852.2	1253.3
Pend Oreille	1155.1	148.9	158.5	320.9
Noxon	334.6	292.3	286.6	315.2
Spokane				
Coeur d'Alene	225.1	54.9	13.7	145.3
SNAKE BASIN				
Snake				
Jackson Lake	624.4	532.6	570.9	612.5
Palisades	1200.0	847.7	1130.0	907.8
American Falls	1673.0	1041.3	1233.7	1151.2
Island Park	127.0	87.2	102.4	105.0
Grassy Lake	15.2	11.2	12.5	10.4
Brownlee	980.2	581.6	550.4	674.4
Goose-Trapper Creeks				
Oakley	74.4	31.3	31.3	26.4
Salmon Falls Creek				
Salmon Falls	182.6	39.7	31.4	51.6
Big Lost				
Mackay	44.2	22.7	38.0	30.3
Big Wood				
Magic	191.5	18.7	111.0	103.6
Little Wood				
Little Wood	30.0	12.6	19.7	16.1
Fish Creek				
Carey Valley	14.4	2.0	5.3	--
Boise				
Anderson Ranch	423.2	209.9	336.6	279.0
Arrowrock	286.6	220.2	227.3	254.3
Lucky Peak	278.2	31.9	66.3	85.9
Lake Lowell (Deer Flat)	169.0	86.5	129.1	122.1
Owyhee				
Owyhee	715.0	540.6	510.5	462.5
Payette				
Cascade	653.2	247.9	383.5	370.8
Deadwood	161.9	55.1	79.5	80.6
Weiser				
Mann Creek	11.1	3.5	3.4	--
Clearwater				
Dworshak	2016.0	758.9	307.5	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	973.4	1300.7	1026.4

RESERVOIR STORAGE

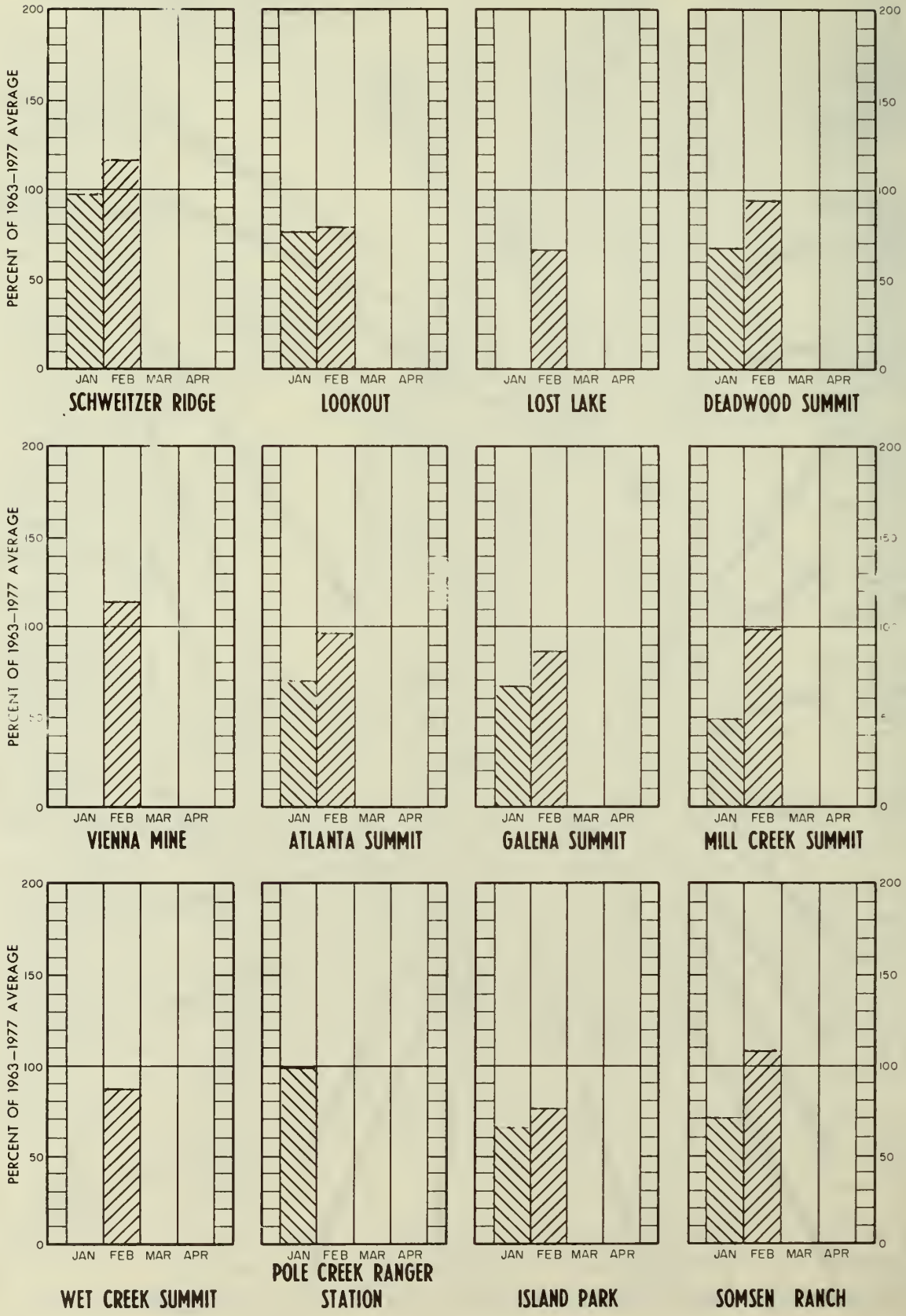
USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1980



SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 — 1977 15 Year Average

FEBRUARY 1, 1980



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	7550	85	Apr-Sep		8858
		6580	85	Apr-Jul		7708
		5200	85	Apr-Jun		6114
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	9820	71	Apr-Sep	--	13781
		8920	71	Apr-Jul	--	12519
		7550	71	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	750	89	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	2050	70	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	925	71	Apr-Sep	--	1309
		875	71	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	710	79	Apr-Sep	--	903
Palisades Inflow 3/		3100	80	Apr-Sep	--	3863
Heise 4/	(nr)	3200	75	Apr-Sep	--	4247
Blackfoot 5/	(nr)	3480	76	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	525	71	Apr-Sep	--	737
Rexburg 7/	(nr)	1090	71	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	100	93	Mar-Sep	--	108
Oakley Reservoir Inflow		30	83	Mar-Sep	--	36
Salmon Falls Creek						
San Jacinto	(nr)	88	93	Mar-Sep	--	95
		84	93	Mar-Jul	--	90
Bruneau River						
Hot Springs	(nr)	210	84	Mar-Sep	--	251

(c) Assuming normal meteorological conditions.

1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	THIS YEAR FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [+]
Little Lost River						
Howe	(nr)	38	85	Apr-Sep	--	45
Wet Creek	(bl)	23	88	Apr-Jun	--	26
		35	85	Apr-Sep	--	41
Big Lost River						
Howell Ranch	(at)	175	79	Apr-Sep	--	225
		125	81	Apr-Jun	--	154
Mackay 8/	(nr)	160	78	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		285	98	Apr-Sep	--	319
Inflow 9/		295	89	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	97	91	Apr-Sep	--	107
		80	92	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	720	98	Apr-Sep	--	733
		660	98	Apr-Jul	--	676
Boise 10/	(nr)	1620	98	Apr-Sep	--	1656
		1330	98	Apr-Jun	--	1360
		1510	98	Apr-Jul	--	1536
South Fork						
Anderson Dam 11/	(at)	610	98	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev. 12/	(nr)	20	85	Apr-Jul	--	23
Owyhee, Nev. 12/	(nr)	64	80	Apr-Jul	--	80
Lake Owyhee		367	94	Apr-Sep	378	392
net inflow 13/		554	96	Feb-Jul	637	578
Payette River						
Horseshoe Bend 14/	(nr)	1700	91	Apr-Sep	--	1860
North Fork						
Cascade 15/	(at)	510	90	Apr-Sep	--	564
Banks 15/	(nr)	655	90	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	400	72	Mar-Sep	--	558

(c) Assuming normal meteorological conditions.

1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [+]
Salmon River						
Whitebird	(at)	6000	83	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	6160	71	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	303	91	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	12.9	104	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	50	100	Apr-Sep	--	50
		47	100	Apr-Jul	--	47

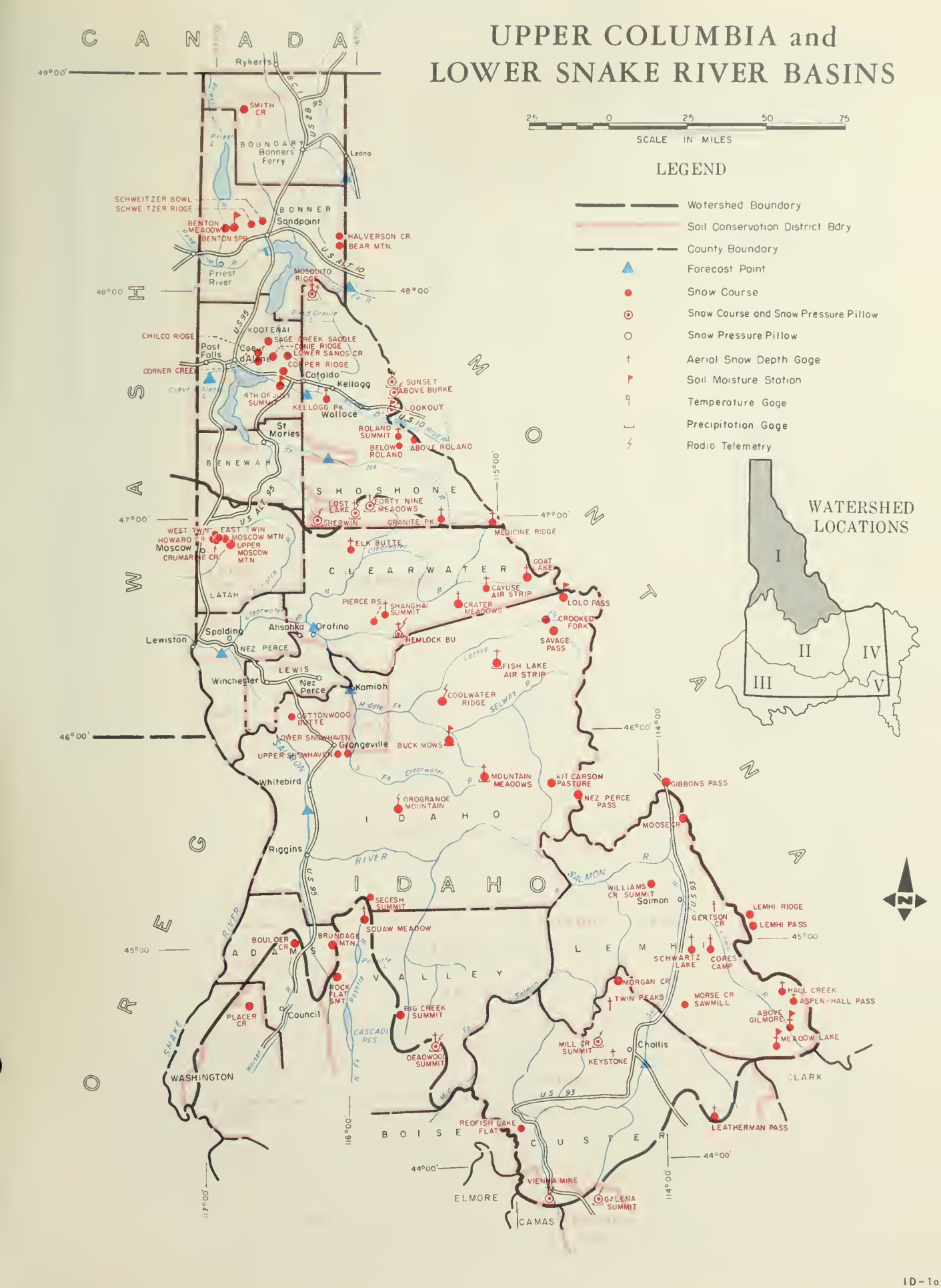
Cooperative forecasts released by Soil Conservation Service and National Weather Service.

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake.
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wild Horse Reservoir.
13/ From WPRS records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

UPPER COLUMBIA and LOWER SNAKE RIVER BASINS



INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

KOOTENAI RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16A7	I	Halverson Creek	3	57N	3E	4850
16A1	I	Smith Creek	29	64N	3W	4800

PEND OREILLE - PRIEST RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16A8	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4900
16A6	I	Schweitzer Bowl	20	58N	2W	4500
16A5	I	Schweitzer Ridge	19	58N	2W	6200

HAYDEN CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16B8	I	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Saddle	10	52N	2W	4100

SPOKANE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15B8SP	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	3	46N	6E	3840
16B2	I	Copper Ridge	6	50N	1W	4800
16B3M	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	3	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2MSP	I	Lookout	4	47N	6E	5120
16B1	I	Lower Sands Creek	32	51N	1W	3400
15B4ASP	I	Medicine Ridge	24	43N	10E	6160
16A4ASP	I	Mosquito Ridge	5	54N	2E	5110
15B5A	I	Roland Summit	26	47N	6E	5200
16C1SP	I	Sherwin	28	42N	1E	3200
15B9ASP	I	Sunset	33	49N	5E	5600

LOWER SNAKE BASIN

PALOUSE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16C6	I	Crumarine Creek	24	40N	5W	3340
16C3	I	East Twin	13	40N	5W	4050
16C5	I	Howard Creek	14	40N	5W	3500
16C2	I	Moscow Mountain	18	40N	4W	4400
16C4P	I	West Twin	14	40N	5W	4250

CLEARWATER RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15D5MAP	I	Buck Meadows	26	31N	8E	5650
15C3A	I	Cayuse Airstrip	4	38N	11E	3700
15C7S	I	Coolwater Mountain	32	33N	8E	6200
16C16	I	Cottonwood Butte	33	32N	1W	5140
15C9A	I	Crater Meadows	2	37N	9E	6100
14C10	I	Crooked Fork	27	37N	14E	3800
16C15A	I	Elk Butte	6	40N	3E	5550
15C2AP	I	Fish Lake Airstrip	35	35N	11E	5000
15B3ASP	I	Forty-nine Meadows	6	43N	5E	4830
14C9A	I	Goat Lake	4	38N	13E	6600
16C6AP	I	Hemlock Butte	7	36N	7E	5500
15C8S	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	16E	5020
14C5M	I	Lolo Pass	16	38N	15E	5240
15B14AS	I	Lost Lake	16	43N	4E	6000
16D7	I	Lower Snowhaven	9	29N	3E	5300
15D6AP	I	Mountain Meadows	9	27N	10E	6300
14D1	M	Nez Perce Pass	25	1S	24W	6575
15D4S	I	Orogrande Mountain	24	27N	6E	7800
15C5	I	Pierce Ranger Station	2	36N	5E	3170
14C6	I	Powell Ranger Station	33	37N	14E	4230
14C4	I	Savage Pass	18	36N	15E	6170
15C4A	I	Shanghai Summit	7	37N	6E	4600
16D4	I	Upper Snowhaven	8 &9	29N	3E	5600

SALMON RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13E19MA	I	Above Gilmore	13	13N	26E	8250
13E21A	I	Aspen-Hall Pass	6	16N	28E	8110
15E2	I	Big Creek Summit	24	15N	5E	6600
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
13E17A	I	Copes Camp	36	18N	22E	7500
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	19W	7100
13E20A	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9800
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23	M	Lemhi Ridge	4	10S	15W	8100
13E18MA	I	Meadow Lake	25	13N	26E	9200
14E1MAP	I	Mill Creek Summit	8	13N	17E	8800
13D16	I	Moose Creek	14	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
13E26	I	Morse Creek Sawmill	8	15N	23E	7120
14E7	I	Redfish Lake Flat	35	10N	13E	6550
13E16A	I	Schwartz Lake	34	18N	22E	8500
14E3A	I	Twin Peaks	28	15N	17E	9170
14F4AP	I	Vienna Mine	1	5N	13E	8950
14D4	I	Williams Creek Summit	34	21N	20E	7800

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY
10J7P	SNOW COURSE AND PRECIPITATION GAGE
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY
10J7p	STORAGE PRECIPITATION GAGE ONLY
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average ½
UPPER COLUMBIA RIVER BASIN							
PEND OREILLE - PRIEST RIVER							
Benton Meadow		2370	1/30	17	3.9	3.2	5.5
Benton Spring		4900	1/30	36	10.9	6.2	13.9
Schweitzer Bowl		4500	1/31	53	18.5	9.5	21.8*
Schweitzer Ridge		6200	1/31	92	38.4	15.6	32.6*
SPOKANE RIVER							
Above Burke		4100	1/30	37	10.4	14.2	16.4*
#Forty-nine Meadows		4840	1/29	49	12.3	12.5	--
Fourth of July Summit		3200	1/30	15	4.2	9.6	7.2
Lookout		5120	1/30	60	20.0	14.4	25.4
#Lost Lake		6080	1/29	87	25.8	19.4	39.4*
Sherwin		3200	1/30	21	5.9	11.7	10.7
LOWER SNAKE RIVER BASIN							
CLEARWATER							
Breezy Saddle		5000	1/29	50	13.3	13.0	--
Cayuse Airstrip		3500	1/29	25	3.5	9.6	9.7*
Crater Meadows		6100	1/29	76	21.6	20.7	31.0*
Crooked Fork		3600	1/30	24	6.1	10.1	10.4*
Fish Lake Airstrip		5650	1/29	74	21.0	20.5	28.8*
Forty-nine Meadows		4840	1/29	49	12.3	12.5	--
Hemlock Butte		5500	1/29	82	22.7	20.6	35.1*
#Hoodoo Basin	Mont.	6000	1/26	87	30.0	25.4	36.3*
#Hoodoo Creek	Mont.	5900	1/26	82	23.7	22.5	32.5*
Lolo Pass		5240	1/30	55	17.4	20.2	21.8*
Lost Lake		6080	1/29	87	25.8	19.4	39.4*
Pierce Ranger Station		3170	2/1	24	7.6	9.6	8.6
Savage Pass		6170	1/30	53	16.2	17.3	19.1*
Shanghai Summit		4600	1/29	44	10.4	14.8	17.4*
SALMON RIVER							
Big Creek Summit		6600	2/2	84	27.4	13.8	26.3
#Boulder Creek		5500	1/31	39	11.1	9.4	18.0
Brundage Mountain		7560	1/29	83	29.5	14.8	32.2*
#Deadwood Summit		6750	1/29	97	32.6	14.4	34.8*
#Galena Summit		8780	1/28	57	15.3	7.5	17.5
#Gibbons Pass	Mont.	7100	1/29	46	12.4	12.0	16.7
Mill Creek Summit		8800	1/31	57	17.0	8.1	17.1
Moose Creek		6200	2/1	32	7.4	9.7	12.6

(b) 1963-77, 15 year period. # Not located directly on this drainage. ½ Estimated 1963-77 15 year average. (A) Aerial observation. ‖ Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]
Morgan Creek	7580	2/1	34	8.6	6.7	10.3
#Rock Flat Summit	5340	1/29	36	9.4	8.0	13.3
#Secesh Summit	6520	2/1	74	24.2	12.3	26.3*
#Squaw Meadow	5900	2/1	72	25.5	12.2	25.8*
Vienna Mine	8950	1/29	89	29.8	13.8	26.1*

MIDDLE SNAKE RIVER BASIN - NORTHSIDE

LITTLE LOST RIVER

Hilts Creek	8000	1/29	33	8.4	4.2	--
Wet Creek Summit	7760	1/29	29	7.6	4.4	8.7*

BIG LOST RIVER

Bear Canyon	7920	1/29	52	13.3	4.9	13.0*
Copper Basin	7650	1/29	23	6.0	2.5	6.8
Fishpole Lake	9350	1/29	55	17.2	7.1	--
Lost-Wood Divide	7900	1/29	58	16.5	7.0	17.0*
Stickney Mill	7450	1/29	32	7.2	3.8	6.0*

LITTLE WOOD RIVER

#Bear Canyon	7920	1/29	52	13.3	4.9	13.0*
Garfield Ranger Station	6560	1/30	33	8.5	3.1	8.0*
Muldoon	6300	1/30	29	7.1	2.8	6.2*
Swede Peak	7640	1/30	47	13.1	4.8	12.6

BIG WOOD RIVER

#Couch Summit	6850	1/28	53	15.1	5.4	13.7*
Dollarhide Summit	8400	1/29	61	19.1	8.8	18.3*
Galena	7300	1/28	47	11.9	6.4	14.8
Galena Summit	8780	1/28	57	15.3	7.5	17.5
Graham Ranch	6280	1/28	42	10.1	4.4	10.5
#Lost-Wood Divide	7900	1/29	58	16.5	7.0	17.0*
Mascot Mine	7760	1/29	42	11.5	5.1	9.8*
Mount Baldy	9000	2/1	57	15.6	6.1	15.2*
Soldier Ranger Station	6100	1/28	40	10.8	3.8	9.8
#Vienna Mine	8950	1/29	89	29.8	13.8	26.1*

BOISE RIVER

Atlanta Summit	7500	1/29	78	24.4	11.8	25.2
Bad Bear	5500	1/28	40	11.1	8.3	11.0
#Bogus Basin	6340	2/2	50	15.8	10.0	17.6
Bogus Basin Road	5520	2/2	16	4.3	7.6	6.0

(b)1963-77, 15 year period. #Not located directly on this drainage. [1] Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent (R) Radioactive Gage snow-water equivalent

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- Aerial Snow Depth Gage
- Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- Radio Telemetry

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN NORTHSIDE

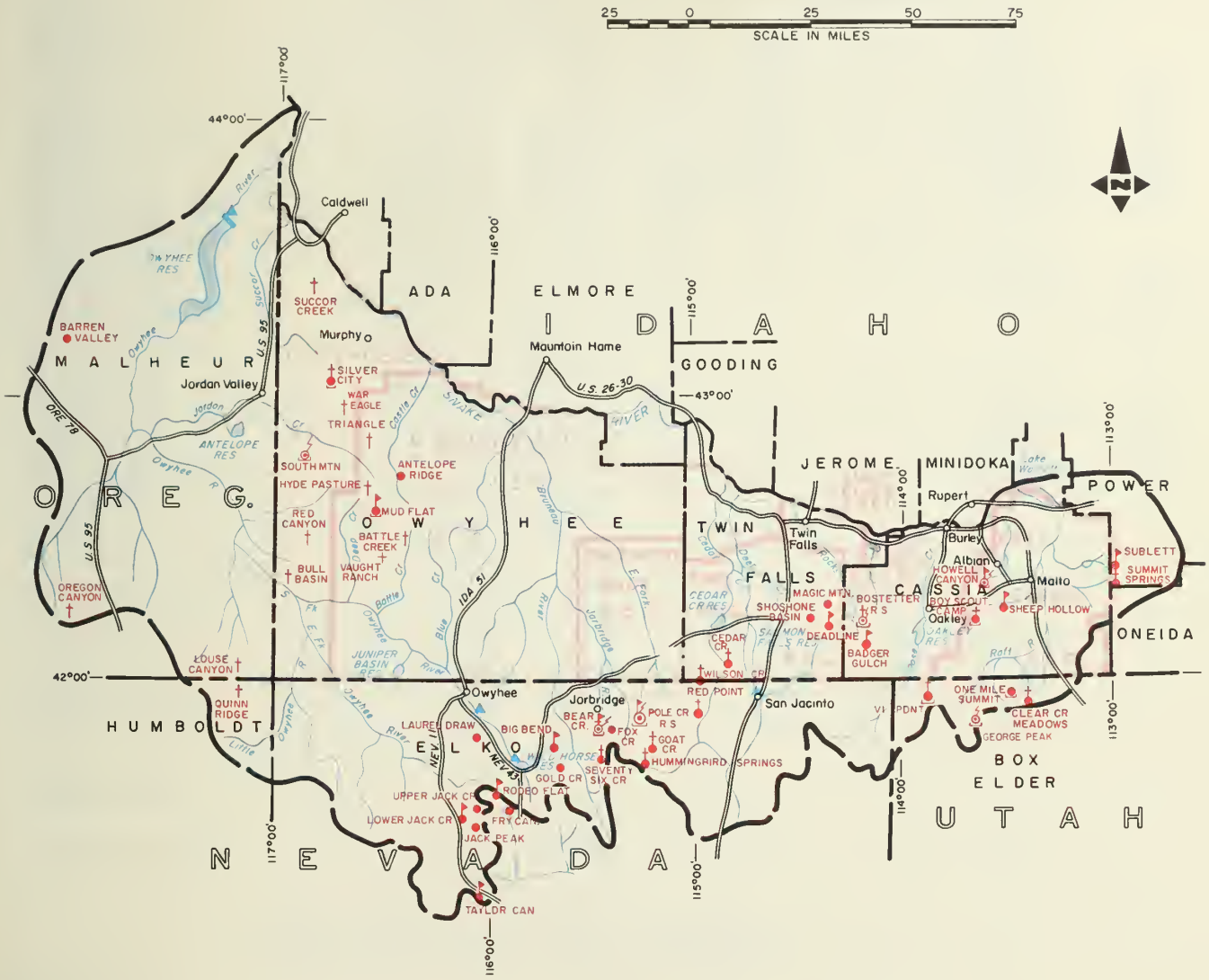
NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
		LITTLE LOST RIVER				
13E5M	I	Fairview Guard Station	27	12N	26E	6750
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6	I	Moonshine	31	13N	26E	7500
13E4	I	Sawmill Canyon	17	12N	26E	6900
13E7MP	I	Wet Creek Summit	15	8N	25E	7760
		BIG LOST RIVER				
13F3	I	Bear Canyon	22	5N	21E	7920
13F2A	I	Copper Basin	25	6N	21E	7650
13F3A	I	Fishpole Lake	28	4N	22E	9350
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6800
14F3A	I	Lost Wood Divide	25	6N	18E	7900
14F2A	I	Stickney Mill	9	6N	19E	7450
13F1	I	White Knob	25	7N	23E	7700
		BIG WOOD RIVER				
15F9	I	Camas Creeks Divide	11	2S	9E	5720
14F8	I	Dollarhide Summit	9	3N	15E	8400
14F1M	I	Galena	2	6N	15E	7440
14F12MPS	I	Galena Summit	5	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6280
14F7	I	Mascot Mine	8	4N	20E	7760
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100
		LITTLE WOOD RIVER				
13F4	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	25	3N	21E	6300
13F9R	I	Swede Peak	4	3N	21E	7640
		FISH CREEK				
13F10	I	Iron Mine Creek	32	3N	23E	6370
13F6	I	Telfer Ranch	12	2N	22E	6000
		BOISE RIVER				
15F4APS	I	Atlanta Summit	23	5N	10E	7500
15F2	I	Bad Bear	35	7N	6E	5500
16F4	I	Bogus Basin Road	32	5N	3E	5520
14F10	I	Couch Summit	9	2N	14E	6850
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14PSR	I	Graham Guard Station	9	7N	10E	5690
15E9AP	I	Jackson Peak	7	8N	9E	7070
15F1MPSR	I	Moores Creek Summit	19	7N	7E	6100
15F6P	I	Prairie	13	2N	7E	4800
15F3A	I	Road Creek	5	5N	8E	5550
15FAPSR	I	Trinity Mountain	6	3N	9E	7780
		CANYON CREEK				
15F7	I	Bennett Mountain	7	2S	9E	6650
15F12	I	Little Camas Flat	21	1S	9E	4950
		PAYETTE RIVER				
16F2PS	I	Bogus Basin	16	5N	3E	6340
15E8PSR	I	Cozy Cove	17	11N	7E	5400
15E3	I	Crawford Ranger Station	21	14N	4E	4800
15E10	I	Deadwood Airstrip	8	11N	7E	5440
15E4AS	I	Deadwood Summit	23	14N	7E	6800
16E4	I	High Valley Summit	9	10N	2E	5170
15E1	I	Lake Fork	3	18N	4E	6000
16E1	I	Rock Flat Summit	1	18N	2E	5340
15D1	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5200
		WEISER RIVER				
16D1P	I	Boulder Creek	16	20N	1W	5500
16E2	I	Placer Creek	15 & 16	17N	3W	6000
		MANN CREEK				
16E9	I	Mann Creek	20	15N	5W	6080
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
17E2	I	Thorson Cabin	12	14N	6W	5320

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RADIOACTIVE GAGE

MIDDLE SNAKE RIVER BASIN SOUTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- Aerial Snow Depth Gage
- Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- Radio Telemetry

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

RAFT RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
13G2AP	I	Boy Scout Camp	8	14S	24E	7760
13H2A	U	Clear Creek Meadows	26	14N	14W	9050
13H4SP	U	George Peak	4	13N	14W	9000
13G1MP	I	Howell Canyon	2	13S	24E	8000
13H1P	U	One Mile Summit	19	14N	14W	7330
13G5M	I	Sheep Hollow	4	14S	24E	6200
12G8M	I	Sublett	8	12S	30E	6000
12G9A	I	Summit Springs	15	13S	30E	6400

GOOSE - TRAPPER CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
14G3M	I	Badger Gulch	24	15S	19E	6660
14G1AP	I	Bostetter Ranger Station	35	14S	19E	7500
13H3AP	U	Vi Pont	17	14N	17W	7670

SALMON FALLS CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
14G5A	I	Cedar Creek	25	15S	13E	7000
14G4M	I	Deadline	25	14S	18E	6900
15H13A	N	Goat Creek	31	46N	60E	8800
14G2	I	Magic Mountain	14	14S	18E	6700
15H18A	N	Red Point	15	47N	61E	7940
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2A	I	Wilson Creek	24	16S	12E	7500

BRUNEAU RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
15H1MAP	N	Bear Creek	31	46N	58E	7800
15H2	N	Fox Creek	33	46N	58E	6800
15H15A	N	Hummingbird Springs	6	45N	60E	8950
15H14MP	N	Pole Creek Ranger Station	13	46N	59E	8330

OWYHEE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
16G6	I	Antelope Ridge	20	8S	1E	5900
18F5	O	Barren Valley	26	17S	38E	4200
16G9a	I	Battle Creek	10	11S	1E	5700
15H4M	N	Big Bend	30	45N	56E	6700
16G10a	I	Bull Basin	19	12S	5W	5600
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
16G5a	I	Hyde Pasture	SE¼ 31	8S	2W	5800
16H4	N	Jacks Peak	28	42N	53E	8420
16H5	N	Laurel Draw	20	45N	53E	6700
17G4a	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	13	42N	53E	6800
16G7MP	I	Mud Flat	34	9S	2W	5500
17G5a	O	Oregon Canyon	9	40S	40E	6950
17H6a	N	Quinn Ridge	9	47N	41E	6300
16G11ap	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3AP	I	Silver City	6	5S	3W	6400
16G1PSR	I	South Mountain	35	7S	5W	6340
16F6a	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
16G4a	I	Triangle	N 35	7S	3W	5150
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12a	I	Vaught Ranch	10	11S	1W	5950
16G13a	I	War Eagle	20	5S	3W	7700

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
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10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE
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10J7a	AERIAL MARKER ONLY
10J7p	STORAGE PRECIPITATION GAGE ONLY
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average b/
Couch Summit	6850	1/28	53	15.1	5.4	13.7*
#Dollarhide Summit	8400	1/29	61	19.1	8.8	18.3*
Graham Guard Station	5690	1/29	37	10.9	6.3	--
Jackson Peak	7070	1/29	72	22.4	11.5	24.1*
Moores Creek Summit	6100	1/28	69	22.8	13.0	23.7
Prairie	4800	1/28	16	4.6	4.6	5.5
#Soldier Ranger Station	6100	1/28	40	10.8	3.8	9.8
Trinity Mountain	7780	1/28	90	30.6	13.8	31.1
#Vienna Mine	8950	1/29	89	29.8	13.8	26.1*
PAYETTE RIVER						
Bear Basin	5350	1/29	39	11.5	--	--
#Big Creek Summit	6600	2/2	84	27.4	13.8	26.3
Bogus Basin	6340	2/2	50	15.8	10.0	17.6
#Brundage Mountain	7560	1/29	83	29.5	14.8	32.2*
Cozy Cove	5400	1/29	39	11.6	7.7	13.2*
Crawford Ranger Station	4800	2/2	23	6.5	4.0	6.7
Deadwood Airstrip	5440	1/29	38	11.8	7.4	11.7
Deadwood Summit	7000	1/29	97	32.6	14.4	34.8*
#Jackson Peak	7070	1/29	72	22.4	11.5	24.1*
Lake Fork	6000	2/1	34	9.0	8.9	11.2*
Rock Flat Summit	5340	1/29	36	9.4	8.0	13.3
Secesh Summit	6520	2/1	74	24.2	12.3	26.3*
Squaw Meadow	5900	2/1	72	25.5	12.2	25.8*
WEISER RIVER						
Boulder Creek	5500	1/31	39	11.1	9.4	18.0
MIDDLE SNAKE RIVER BASIN - SOUTHSIDE						
RAFT RIVER						
Howell Canyon	7980	1/30	60	17.8	13.5	18.6
SALMON FALLS CREEK						
#Bear Creek Nev.	7800	1/28	47	14.0	9.9	13.6
Deadline	6900	1/27	68	18.0	16.6	15.7
Goat Creek Nev.	8800	1/31	43	12.3	9.7	11.8
Magic Mountain	6700	1/27	46	14.6	15.1	12.8
#Pole Creek Rgr. Sta. Nev.	8330	1/31	46	14.0	11.3	14.4
BRUNEAU RIVER						
Bear Creek Nev.	7800	1/28	47	14.0	9.9	13.6

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [4]
Pole Creek Rgr. Sta.	Nev.	8330	1/31	46	14.0	11.7	14.4
#Seventy-six Creek	Nev.	7100	1/28	31	8.8	6.2	7.8
OWYHEE RIVER							
#Bear Creek	Nev.	7800	1/28	47	14.0	9.9	13.6
#Seventy-six Creek	Nev.	7100	1/28	31	8.8	6.2	7.8
South Mountain		6340	1/28	34	10.8	10.4	9.9
UPPER SNAKE RIVER BASIN							
CAMAS-BEAVER CREEKS							
Camp Creek		6800	1/30	21	4.0	4.4	8.3
Kilgore		6200	1/28	24	6.2	6.8	8.6
HENRYS FORK RIVER							
Big Springs		6400	1/28	36	10.3	12.0	14.7
Grassy Lake	Wyo.	7230	1/29	56	16.3	24.9	24.8
Island Park		6290	1/28	34	9.0	10.6	12.0
Sawtell Mountain		8720	1/28	68	22.7	14.7	22.8*
Targhee Pass		7000	1/29	27	6.3	7.2	10.5*
Valley View		6740	1/29	33	8.6	8.2	12.5
White Elephant		7700	1/28	52	16.8	10.3	13.2*
TETON RIVER							
Darby Canyon	Wyo.	8250	1/31	49	14.0	14.2	15.4*
Freds Mountain	Wyo.	8150	1/29	48	13.0	13.6	13.9*
Garns Mountain		8300	Not measured			32.5	27.4*
Indian Meadows	Wyo.	8240	1/29	65	20.0	21.6	--
Jackpine Creek	Wyo.	7350	1/29	42	11.3	14.2	14.9*
McRenolds Reservoir		6800	1/29	38	9.9	12.8	13.0*
Phillips Bench	Wyo.	8200	1/30	58	15.8	23.4	17.8*
Pine Creek Pass		6750	1/29	34	8.6	12.3	12.0
State Line		6650	1/29	31	8.8	12.4	10.0
Teton Pass W.S.	Wyo.	8400	1/31	47	12.4	21.8	16.8*
WILLOW CREEK							
Aspen Grove		6500	2/1	35	11.0	8.2	8.4*
Birch Creek		6800	2/1	28	6.8	7.5	7.4*
Blue Ridge		6800	2/4	42	12.8	10.4	--
Bone		6200	2/4	21	5.1	5.7	6.0*
Brockman Station		6430	2/4	27	7.2	8.2	--
Hell Creek		7100	2/4	36	9.3	10.6	--

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent (K) Radioactive Gage snow-water equivalent*

UPPER SNAKE RIVER BASIN

INDEX to SNOW COURSES

UPPER SNAKE RIVER BASIN

SNAKE RIVER - WYOMING

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
10G4	Wy	Afton Ranger Station	30	32N	118W	6200
10F1	Wy	Arizona	3	46N	115W	6850
10E8	Wy	Aster Creek	44° 17'		110° 38'	7700
10F2	Wy	Base Camp	20	46N	113W	6900
10F7	Wy	Blackrock	4	44N	111W	8600
10G2A	Wy	Blind Bull	6	34N	115W	8750
10F14	Wy	Bryan Flat	9	38N	115W	6250
10G7	Wy	CCC Camp	9	29N	118W	7500
10G5A	Wy	Cottonwood Lake	25	31N	118W	7500
10E10	Wy	Coulter Creek	44° 09'		110° 33'	7600
10F17MP	Wy	East Rim Divide #2	32	37N	111W	7950
10F6	Wy	Four Mile Meadows	35	45N	112W	7770
10E13	Wy	Glade Creek	12	48N	116W	7200
10F18	Wy	Greys Boundary	33	37N	118W	5800
10F19	Wy	Gros Ventre Summit	36	40N	111W	8750
10G3	Wy	Grover Park Divide	27	33N	118W	7500
10E14	Wy	Huckleberry Divide	32	48N	115W	7300
10E9PS	Wy	Lewis Lake Divide	44° 13'		110° 40'	7900
10F4MP	Wy	Moran	8 & 17	45N	114W	6800
10F3	Wy	Moran Bay	14	45N	116W	6800
10G6	Wy	Poison Meadows	29	30N	116W	8500
10G8P	Wy	Salt River Summit	32	29N	118W	7900
10E12MP	Wy	Snake River Station	9	48N	115W	6780
10F20M	Wy	Snow King Mountain #3	4	40N	117W	7600
10E7	Wy	Thumb Divide	44° 22'		110° 35'	7900
10F9MP	Wy	Togwotee Pass	29	44N	110W	9600
10F5	Wy	Turpin Meadows	14	45N	112W	6930
10G1A	Wy	Young's Ranch	26	34N	116W	6530

HENRYS FORK RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11E9	I	Big Springs	4	13N	44E	6400
11E18	I	Black Canyon	11	13N	45E	7850
11E19	I	Black Moose	33	14N	45E	8125
10E15	Wy	Grassy Lake	6	48N	117W	7230
11E10M	I	Island Park	28	13N	43E	6290
11E16	I	Latham Springs	9	13N	45E	7650
11E14	I	Lucky Dog	2	13N	45E	6900
11E32	I	Sawtell Mountain	7	14N	43E	8720
11E34	I	Targhee Pass	32	16N	44E	7000
11E8M	I	Valley View	7	15N	44E	6740
11E36	I	White Elephant	17	14N	43E	7700

TETON RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
10F21	Wy	Darby Canyon	28	43N	118W	8250
10F22	Wy	Freds Mountain	12	44N	118W	8150
11F13	I	Garns Mountain	20	4N	44E	8300
10F25	Wy	Indian Meadows	31	46N	117W	8240
10F26	Wy	Jackpine Creek	15	46N	118W	7350
11F12	I	McRenolds Reservoir	5	7N	46E	6800
10F27	Wy	Miles Creek	13	44N	118W	7300
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6650
10F13	Wy	Teton Pass W. S.	24	41N	118W	8400

CAMAS - BEAVER CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11E11	I	Blue Ledge Mine	27	13N	38E	6700
12E3	I	Camp Creek	21	13N	36E	6800
11E12	I	Kilgore	6	12N	39E	6200

MEDICINE LODGE CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
12E4	I	Irving Creek	20	13N	33E	7035
12E5	I	Webber Creek	23	12N	32E	6700

WILLOW CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11F10	I	Aspen Grove	36	2N	41E	6500
11F3	I	Birch Creek	36	2N	41E	6800
11F17I	I	Blue Ridge	35	2S	39E	6800
11F8	I	Bone	29	1S	40E	6250
11F16	I	Brockman Station	19	2S	43E	6430
11F15	I	Hell Creek	27	1S	42E	7100
11F14	I	Mud Creek	3	2S	39E	7150
11F11R	I	Sheep Mountain	30	2S	41E	6570
11F5R	I	Tex Creek	36	1N	42E	6650

SAND CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11F6	I	Henry Creek	7	1S	39E	5650

BLACKFOOT RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11G3	I	Austin Brothers Ranch	28	7S	43E	6400
11G5PS	I	Slug Creek Divide	15	10S	44E	7225
11G1MS	I	Somsen Ranch	25	5S	43E	7000
11G29	I	Ten Mile Pass	8	8S	41E	6250

PORTNEUF RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
12G5	I	Dempsey Creek	18	10S	38E	6100
12G6M	I	Lower Pebble	7	8S	38E	5800
12G1	I	Mink Creek	33	7S	34E	6300
12G2M	I	Pebble Creek	34	7S	37E	6550

LEGEND

Numbering System (exomple)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RADIOACTIVE GAGE

GREAT BASIN

SCALE IN MILES
25
0
25
50
I D A H O
U T A H
W Y O M I N G
POWER
BANNOCK
CARIBOU
CASSIA
ONEIDA
FRANKLIN
BEAR LAKE
LINCOLN
UINTA
SUMMIT
Sada Spring
SLUG CREEK DIVIDE
SALT RIVER SUMMIT
CCC CAMP
LITTLE BEAVER
WHISKEY FLAT
UPPER HOME CANYON
GIVEOUT
LOWER HOME CANYON
MONTPELIER CR
PINEY LABARGE
BIG PARK
KELLY R.S.
DANIELS CREEK
CLIFF CANYON
UPPER ELKHORN
LOWER ELKHORN
SUMMIT SPRINGS
EMIGRANT SUMMIT
STRAWBERRY CR
STRAWBERRY
MILK DIVIDE
EMIGRANT CANYON
CHRISTENSEN RANCH
LIBERTY RING
DRY BASIN
HORSESHOE BASIN
WILLOW FLAT
WORM Cr
CUB RIVER R.S.
FRANKLIN BASIN
DRY CREEK FLAT
OXFORD MTN
Malad City
Preston
Garden City
GARDEN CITY SUMMIT
Bear Lake
Geneva
Montpelier
Border
Nugget
Sage
Laketown
Randolph
Woodruff
MONTE CHRISTO R.S.
DRY BREAD POND
Almy
Evanston
Castle Rock
BURT'S-MILLER RANCH
CHALK CREEK NO.3
CHALK CREEK NO.2
CHALK CREEK NO.1
WHITNEY G.S.
STILLWATER CAMP
HAYDEN FORK
TRIAL LAKE
U.S. 191
U.S. 30N
U.S. 30S
Bear River
Big
113°00'
112°00'
111°00'
42°
42°00'
41°00'
N
LEGEND
Watershed Boundary
Soil Conservation District Bdry
County Boundary
Forecast Point
Snow Course
Snow Course and Snow Pressure Pillow
Snow Pressure Pillow
Aerial Snow Depth Gage
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INDEX to SNOW COURSES

GREAT BASIN

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
		BEAR RIVER				
10G11	Wy	Big Park	7	27N	117W	8700
11H13MP	U	Dry Bread Pond	19	8N	4E	8230
11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burt's-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	1S	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300
		MONTPELIER CREEK				
11G16	I	Giveout	2	12S	45E	6840
11G20	I	Little Beaver	26	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7500
11G18	I	Montpelier Creek	22	12S	45E	6570
11G26	I	Upper Home Canyon	31	11S	45E	8500
11G21	I	Whiskey Flat	26	11S	45E	6985
		MINK CREEK				
11G11	I	Christensen Ranch	27	13S	41E	5600
11G14A	I	Dry Basin	30	13S	42E	7900
11G6MP	I	Emigrant Summit	21	12S	42E	7350
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13A	I	Liberty Spring	7	13S	42E	8600
11G9M	I	Strawberry Creek	9	13S	41E	5800
11G10	I	Strawberry Mink Divide	14	13S	41E	6800
		CUB RIVER				
11G12	I	Cub River Ranger Station	5	15S	41E	5400
11G8S	I	Franklin Basin	1	16S	41E	8000
11G4P	I	Willow Flat	2	15S	41E	6100
11G28	I	Worm Creek	28	14S	41E	6660
		MALAD RIVER				
12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6400
12G4	I	Dry Creek Flat	28	13S	37E	6480
12G11	I	Lower Elkhorn	30	12S	36E	7000
12G3	I	Oxford Mountain	27	13S	37E	6800
12G10	I	Upper Elkhorn	25	12S	35E	7100

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
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10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
Mud Creek	7150	2/4	47	13.7	9.3	--
Sheep Mountain	6570	2/4	32	8.7	8.3	9.8*
Tex Creek	6650	1/31	31	7.7	6.8	6.5*
BLACKFOOT RIVER						
Austin Brothers Ranch	6400	1/30	25	8.6	8.3	6.4
Slug Creek Divide	7230	1/30	47	13.2	11.0	11.5
Somsen Ranch	7000	1/30	41	11.0	12.5	10.1
PORTNEUF RIVER						
Dempsey Creek	6100	2/1	36	10.2	8.8	8.3
Lower Pebble	5800	2/3	40	11.2	10.2	9.2*
Mink Creek	6300	2/2	42	12.3	10.2	12.4*
Pebble Creek	6550	2/3	44	14.5	11.2	11.2
GREAT BASIN						
BEAR RIVER						
Emigrant Summit	7380	1/30	65	16.6	17.8	17.0
Emigration Canyon	6500	1/30	36	9.2	--	7.5
MONTPELIER CREEK						
Giveout	6840	1/31	38	9.6	9.0	8.5
Little Beaver	6970	1/31	39	10.7	11.2	10.6
Lower Home Canyon	7640	2/1	42	10.9	9.8	10.1*
Montpelier Creek	6570	1/31	26	6.6	5.8	5.8
Upper Home Canyon	8560	2/1	60	17.7	14.2	16.3*
Whiskey Flat	6960	1/31	30	7.9	6.6	6.5
MINK CREEK						
#Emigrant Summit	7380	1/30	65	16.6	17.8	17.0
Strawberry Creek	5800	1/30	27	6.7	--	7.4
CUB RIVER						
Cub River Ranger Station	5400	2/3	22	6.2	8.6	6.4
#Franklin Basin	8000	2/3	50	18.1	18.1	17.8*
Willow Flat	6100	2/3	36	11.6	14.8	10.9

*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (K) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]

ADDITIONAL MEASUREMENTS RECEIVED LATE

WEBB CREEK

Kruse Meadows	4800	2/1	23	6.2	9.1	--
Soldier Meadow	4640	2/1	23	5.6	9.2	--
Webb Creek	4720	2/1	25	6.2	9.1	--

(b)1963–77, 15 year period. #Not located directly on this drainage. [1] Estimated 1963–77 15 year Average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service

U.S. Department of Commerce
NOAA, National Weather Service

U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
ROOM 345
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BOISE, IDAHO 83702

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Water Supply Outlook For Idaho

SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

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MAR. 1, 1980

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TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates os mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountoin areas. A total of about ten samples are taken ot each location. The averoge of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbio. Networks of outomotic snow woter equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow woter ond other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR MARCH 1, 1979

In general, fair to good water supply is the outlook for the 1980 season. Exceptions to this are some small low elevation streams with no storage facilities such as the Palouse River where shortages are probable.

Forecasts of seasonal runoff range from 67 percent of normal for the Spokane River at Post Falls to 113 percent of average for Montpelier Creek near Montpelier. Proper management of available water should insure adequate supplies for most areas. Due to rain at lower elevations and warm temperatures, soil moisture at low elevations has improved markedly. Middle elevations are beginning to show improvement but high elevation soil is still dry and will absorb a considerable amount of water when snowmelt starts.

Water equivalent of the snowpack in relation to normal remained static or showed improvement throughout the state except for the Spokane and Priest River watersheds in North Idaho and the Blackfoot, Portneuf and some Great Basin drainages in the Southeast which showed a slight decline. The snowpack is extremely variable ranging from a low of 37 percent of normal on the Palouse watershed to highs of 127 percent and 129 percent of average for Jordan Creek in the Southwest and Malad River in the Southeast respectively.

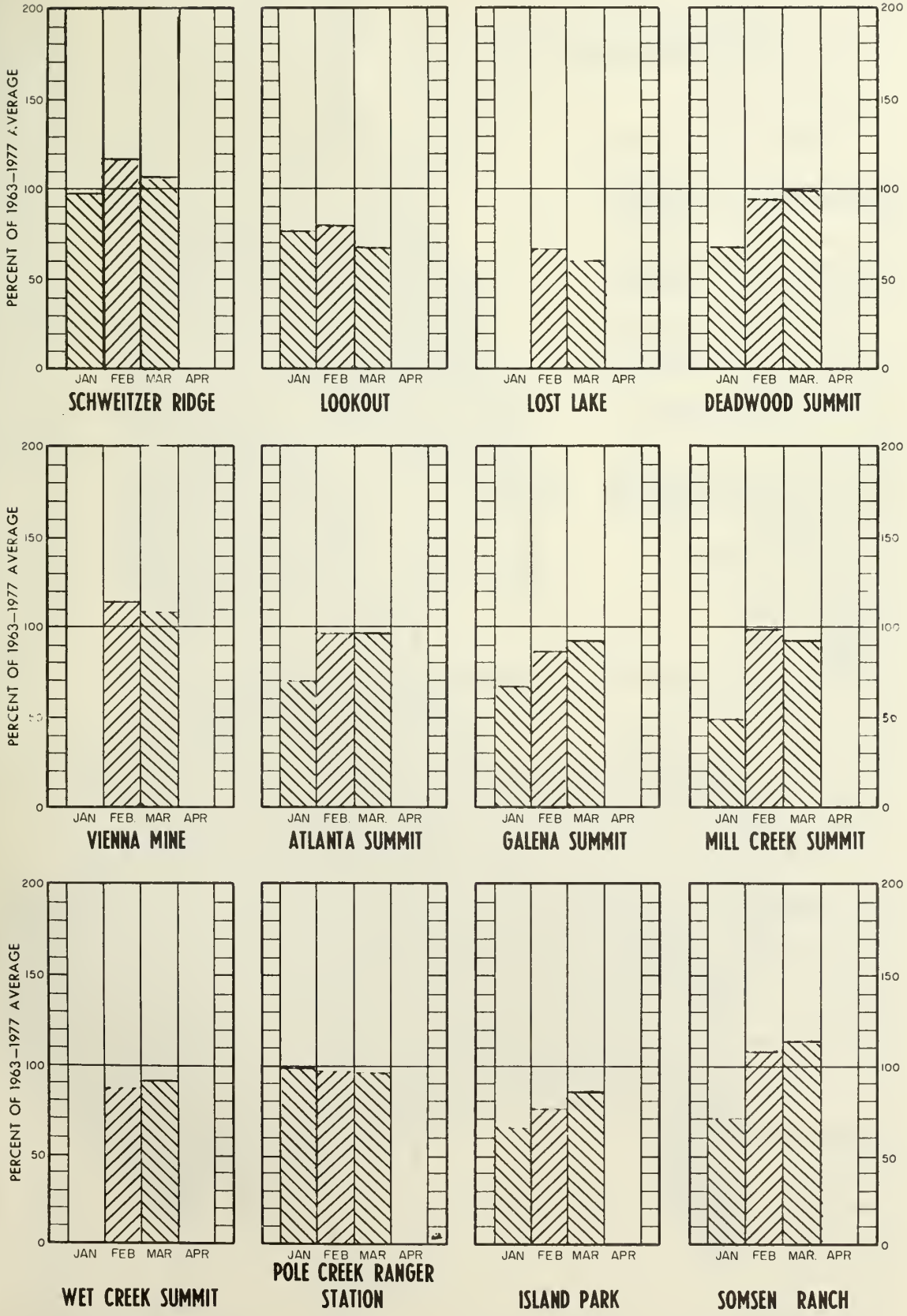
In general reservoir storage has improved during February and most reservoirs are expected to fill. Filling will depend to a great extent on climatic conditions for the remainder of the spring season and on irrigation demands.

The National Weather Service reports that precipitation averaged above normal for February in Idaho. The average was 115 percent of normal with a range from 64 percent at Kellogg and 97 percent at Porthill to 148 percent at Salmon and 152 percent at Grangeville. For the water year the State stands at 98 percent of normal.

Temperature averages are from 2° F. above normal in Northern Idaho to 5° F. above in Southern Idaho.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

MARCH 1, 1980



COMPARISON of SNOW COVER

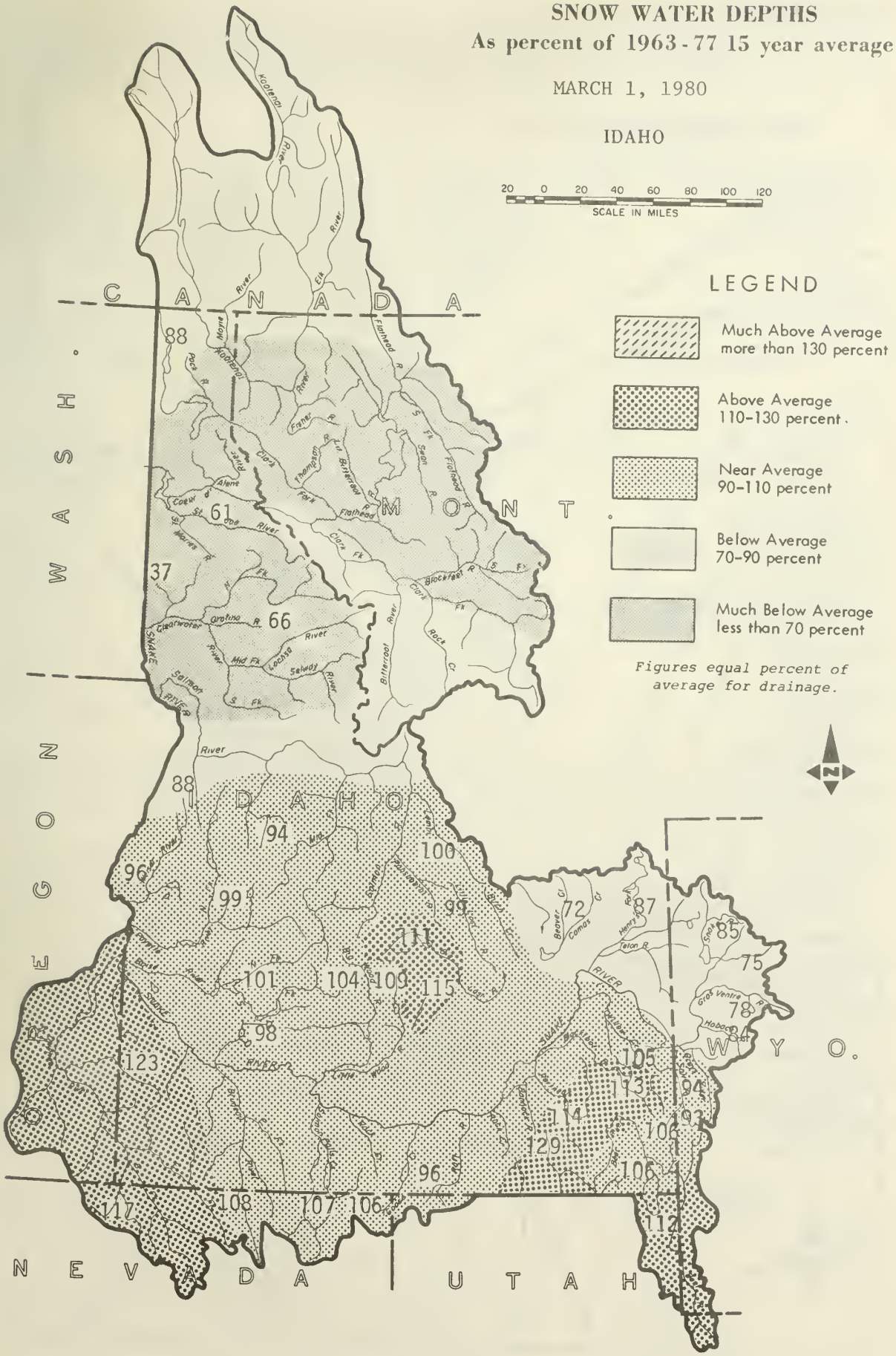
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF: LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	38	95	77
Pend Oreille River	109	72	71
Clark Fork River	76	70	71
Flathead River	38	76	71
Priest River	4	102	88
Spokane River	12-13	62	61
Hayden Lake Drainage	4	34	-
LOWER SNAKE RIVER BASIN			
Palouse River	5	26	37
Clearwater River	16-19	74	66
Salmon River	26-27	119	94
Lemhi River	6	120	100
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	5-6	114	99
Big Lost River	7	175	111
Fish Creek	2	112	115
Little Wood River	4	151	109
Big Wood River	10	147	104
Boise River	16	130	101
Canyon Creek	3	113	98
Payette River	14	124	99
Weiser River	6	96	88
Mann Creek	4	101	96
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	5-7	105	96
Goose-Trapper Creek	2-5	106	106
Salmon Falls Creek	9	101	107
Bruneau River	5	108	108
Owyhee River	6	80	117
Jordan Creek	3	96	123
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Res.	22	78	86
Camas-Beaver Creeks	2	82	72
Henrys Fork River	7	89	87
Teton River	9	71	84
Willow Creek	4-8	103	105
Blackfoot River	3	93	113
Portneuf River	4	104	111
GREAT BASIN			
Bear River - Upper	4	104	112
Bear River - Lower	14	95	108
Montpelier Creek	6	96	106
Mink Creek	7	100	113
Cub River	3-4	92	106
Malad River	4-6	103	129

SNOW WATER DEPTHS

As percent of 1963-77 15 year average

MARCH 1, 1980

IDAHO



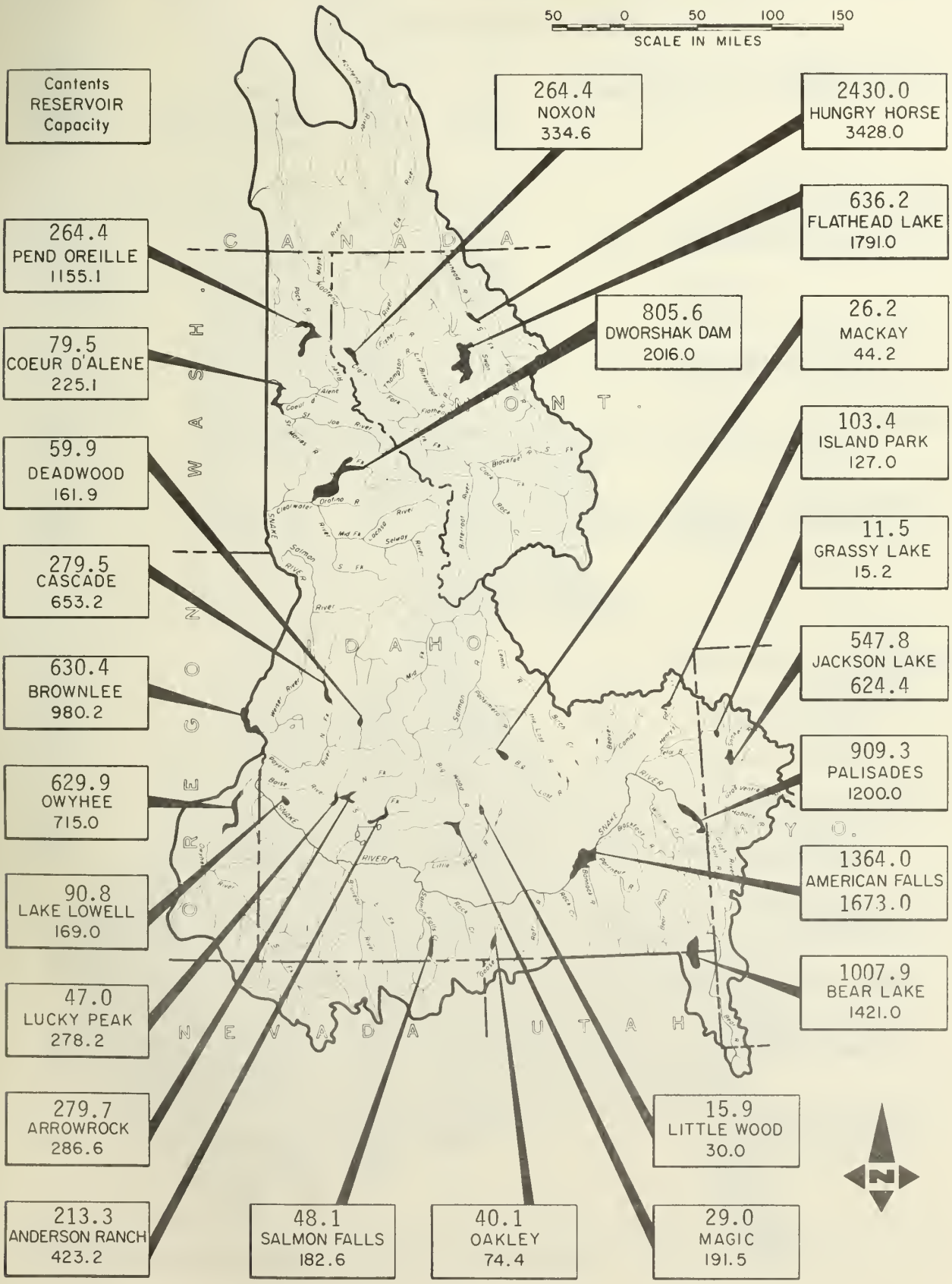
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2430.0	2236.0	2200.0
Flathead	1791.0	636.2	625.6	994.6
Pend Oreille	1155.1	155.0	135.0	376.0
Noxon	334.6	264.4	310.3	299.1
Spokane				
Coeur d'Alene	225.1	79.5	70.5	121.6
SNAKE BASIN				
Snake				
Jackson Lake	624.4	547.8	559.8	615.6
Palisades	1200.0	909.3	987.9	903.6
American Falls	1673.0	1364.0	1395.8	1241.9
Island Park	127.0	103.4	99.9	114.6
Grassy Lake	15.2	11.5	12.8	10.6
Goose-Trapper Creeks				
Oakley	74.4	40.1	35.1	29.3
Salmon Falls Creek				
Salmon Falls Creek	182.6	48.1	35.9	55.5
Big Lost				
Mackay	44.2	26.2	41.0	32.4
Big Wood				
Magic	191.5	29.0	116.0	113.9
Little Wood				
Little Wood	30.0	15.9	22.5	17.8
Fish Creek				
Carey Valley	14.4	3.0	5.3	--
Boise				
Anderson Ranch	423.2	213.3	319.4	256.5
Arrowrock	286.6	279.7	277.8	251.4
Lucky Peak	278.2	47.0	82.9	87.1
Lake Lowell (Deer Flat)	169.0	90.8	133.7	132.6
Owyhee				
Owyhee	715.0	629.9	598.8	491.3
Payette				
Cascade	653.2	279.5	362.4	338.8
Deadwood	161.9	59.9	84.0	85.9
Weiser				
Mann Creek	11.1	8.0	4.2	--
Clearwater				
Dworshak	2016.0	805.6	328.1	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1007.9	1025.1	1030.6

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

MARCH 1, 1980



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	THIS YEAR FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	7270	82	Apr-Sep	--	8858
		6320	82	Apr-Jul	--	7708
		5050	82	Apr-Jun	--	6144
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	9420	67	Apr-Sep	--	13781
		8390	67	Apr-Jul	--	12519
		7100	67	Apr-Jul	--	10633
Priest River						
Priest River 1/	(at)	760	90	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	2000	67	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	890	68	Apr-Sep	--	1309
		840	68	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	750	83	Apr-Sep	--	903
Palisades Inflow		3250	84	Apr-Sep	--	3863
Heise 4/	(nr)	3450	81	Apr-Sep	--	4247
Blackfoot 5/	(nr)	3755	82	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	585	79	Apr-Sep	--	737
Rexburg 7/	(nr)	1210	79	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	100	93	Mar-Sep	--	108
Oakley Reservoir Inflow		35	97	Mar-Sep	--	36
Salmon Falls Creek						
San Jacinto	(nr)	95	100	Mar-Sep	--	95
		90	100	Mar-Jul	--	90
Bruneau River						
Hot Springs	(nr)	235	94	Mar-Sep	--	251

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

PROSPECTIVE STREAMFLOW

Based on Snow Surveys made on approximately

March 1, 1980

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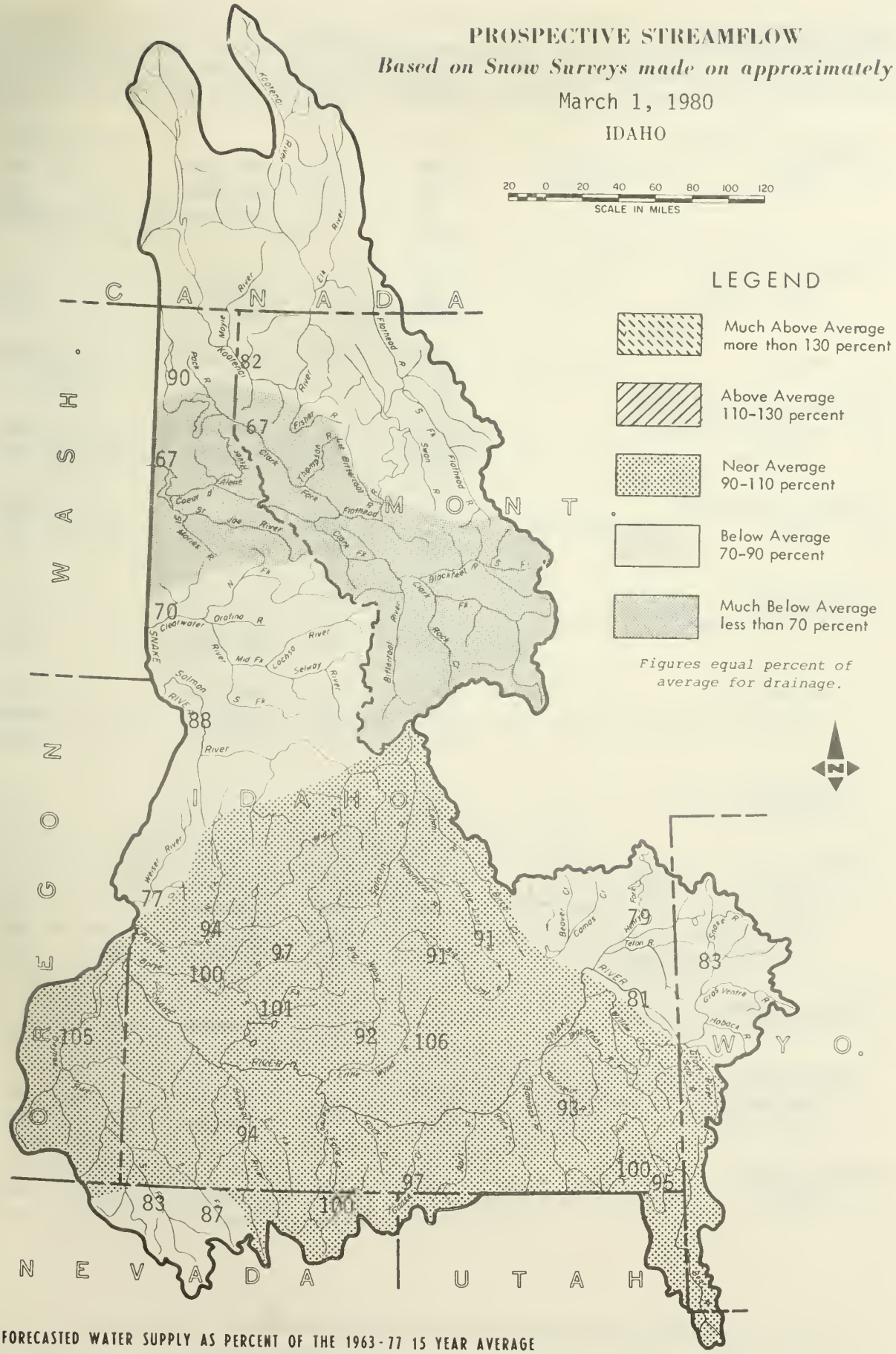

FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Little Lost River						
Howe	(nr)	40	91	Apr-Sep	--	44
Wet Creek	(bl)	24	92	Apr-Jun	--	26
		38	92	Apr-Sep	--	41
Big Lost River						
Howell Ranch	(at)	205	91	Apr-Sep	--	225
		140	91	Apr-Jun	--	154
Mackay 8/	(nr)	180	88	Apr-Sep	--	204
Big Wood River						
Magic Reservoir 9/		295	92	Apr-Sep	--	319
Inflow		310	93	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	115	106	Apr-Sep	--	107
		95	108	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	710	97	Apr-Sep	--	733
		655	97	Apr-Jul	--	676
Boise 10/	(nr)	1660	100	Apr-Sep	--	1656
		1360	100	Apr-Jun	--	1360
		1540	100	Apr-Jul	--	1536
South Fork						
Anderson Dam 11/	(at)	630	101	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev. 12/	(nr)	20	87	Apr-Jul	--	23
Owyhee, Nev. 12/	(nr)	66	83	Apr-Jul	--	80
Lake Owyhee		412	105	Apr-Sep	346	392
net inflow 13/		561	110	Mar-Jul	548	510
Payette River						
Horseshoe Bend 14/	(nr)	1750	94	Apr-Sep	--	1860
North Fork						
Cascade 15/	(at)	535	95	Apr-Sep	--	564
Banks 15/	(nr)	680	94	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	430	77	Mar-Sep	--	558

(c) *Assuming normal meteorological conditions.*

† 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	THIS YEAR FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
Salmon River						
Whitebird	(at)	5820	88	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	6070	70	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	314	95	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	14	113	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	50	100	Apr-Sep	--	50
		47	100	Apr-Jul	--	47

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River near Bellevue and Camas Creek near Blaine.
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wild Horse Reservoir.
13/ From WPRS records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.

(c) *Assuming normal meteorological conditions.*

+ 1963-1977 period.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter February 1980		Fall - Winter Nov. 78 - Feb. 80	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	2.42	- .45	9.56	- 2.09
Flathead	1.38	- .36	6.79	- 2.41
Clark Fork	.91	- .36	4.98	- 1.80
Pend Oreille-Spokane	2.36	- .48	11.01	- 4.01
Upper Snake	1.84	- .01	6.99	- 1.60
Snake River Plain	1.07	+ .29	4.73	+ .43
Salmon-Payette-Boise	2.30	+ .55	8.56	- 1.50
Clearwater	2.63	- .24	10.88	- 4.04
Owyhee-Malheur	1.22	+ .37	4.74	- .08

1/ Preliminary analysis and data by the National Weather Service and Meterological Service of Canada.

2/ Departure from 15-year (1963-1977) drainage division average.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]
UPPER COLUMBIA RIVER BASIN						
KOOTENAI RIVER						
#Bear Mountain	5400	3/1	92	38.1	--	53.7*
Halverson Creek	4850	2/26	86	34.0	--	39.1*
PEND OREILLE - PRIEST RIVER						
Bear Mountain	5400	3/1	92	38.1	--	53.7*
Benton Meadow	2370	2/27	16	4.8	7.0	6.4
Benton Spring	4900	2/27	37	12.6	17.5	17.7
#Mosquito Ridge (A)	5110	2/27	68	24.1	31.4	34.6
Schweitzer Bowl	4500	2/28	55	21.1	24.3	28.1*
Schweitzer Ridge	6200	2/28	104	42.8	30.8	40.3*
HAYDEN LAKE						
Chilco Ridge	3650	2/26	6	2.2	10.0	--
Conie Ridge	3900	2/26	10	3.1	13.1	--
Corner Creek	3150	2/26	11	3.3	10.2	--
Sage Creek Saddle	4100	2/26	28	9.8	20.2	--
SPOKANE RIVER						
Above Burke	4100	2/28	35	12.0	23.6	22.9*
Copper Ridge	4800	2/27	33	11.2	27.7	25.1
#Forty-nine Meadows	4840	2/29	47	14.9	23.4	27.2
Fourth of July Summit	3200	2/28	8	2.9	12.4	8.9
Granite Peak	6000	2/29	85	26.6	--	39.5*
Kellogg Peak (A)	5560	2/27	55	19.6	31.0	28.2*
Lookout	5120	2/28	62	20.6	27.8	31.0
#Lost Lake	6080	2/29	97	29.9	36.7	50.0*
Lower Sands Creek	3400	2/27	26	8.4	18.5	17.5*
Mosquito Ridge (A)	5110	2/27	68	24.1	31.4	34.6
Roland Summit (A)	5200	2/27	56	19.6	29.0	31.3
Sherwin	3200	2/27	17	5.7	15.7	13.3
Sunset (A)	5600	2/27	76	24.3	32.3	32.6*
LOWER SNAKE RIVER BASIN						
PALOUSE RIVER						
Crumarine Creek	3340	2/29	0	0.0	12.0	7.6
East Twin	4050	2/29	10	4.0	14.5	10.8
Howard Creek	3500	2/25	6	2.1	8.7	5.6*
Moscow Mountain	4360	2/29	23	8.2	19.2	15.6
West Twin	4250	2/25	10	3.6	13.8	9.4

(b)1963-77. 15 year period. #Not located directly on this drainage. [1] Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [1]
CLEARWATER							
Breezy Saddle		5000	2/29	51	15.8	24.0	--
Buck Meadows		5650	2/29	59	16.3	--	25.8*
Cayuse Airstrip		3500	2/29	22	5.1	12.2	12.0
Crater Meadows		6100	2/29	85	27.1	32.8	38.9
Crooked Fork		3600	2/25	25	7.5	12.2	12.7*
Elk Butte		5420	2/29	58	17.5	--	34.7
Fish Lake Airstrip		5650	2/29	80	24.7	31.0	36.3
Forty-nine Meadows		4840	2/29	47	14.9	23.4	27.2
Goat Lake		6500	2/29	96	29.7	--	42.1
#Granite Peak		6000	2/29	85	26.6	--	39.5*
Hemlock Butte		5500	2/29	87	27.7	35.1	43.6*
#Hoodoo Basin	Mont.	6000	2/24	97	37.2	42.3	45.4*
#Hoodoo Creek	Mont.	5900	2/24	91	34.5	40.2	42.0*
Kit Carson Pasture		4950	2/24	24	7.6	9.2	--
Lolo Pass		5240	2/25	61	21.5	30.7	27.5
Lost Lake		6080	2/29	97	29.9	36.7	50.0*
Mountain Meadows		6300	2/29	46	12.0	--	21.6*
#Nez Perce Pass	Mont.	6575	2/24	37	10.6	18.6	15.7
Pierce Ranger Station		3170	2/29	20	5.6	12.8	10.9
Savage Pass		6170	2/25	60	19.8	24.8	24.1
Shanghai Summit		4600	2/29	40	11.9	23.9	24.1
WEBB CREEK							
Kruse Meadows		4800	2/15	25	6.8	11.5	--
Soldier Meadow		4640	2/15	26	6.8	11.1	--
Webb Creek		4720	2/15	27	7.1	11.4	--
SALMON RIVER							
#Banner Summit		7040	2/27	78	26.4	20.0	--
Big Creek Summit		6600	2/25	105	34.5	23.8	31.6
Borah (A)		8250	3/1	18	5.0	--	--
#Boulder Creek		5500	2/29	41	14.0	20.3	21.8
Brundage Mountain		7560	2/27	109	41.6	29.8	40.6*
#Deadwood Summit		6750	12/27	118	40.9	28.5	41.3*
Doublespring Pass		8400	3/1	34	9.6	7.6	8.7*
#Galena Summit		8780	2/26	63	19.0	13.5	20.6
#Gibbons Pass	Mont.	7100	2/27	52	16.6	18.9	21.2
Leatherman Pass (A)		9800	3/1	48	13.7	--	20.2*
#Lemhi Pass	Mont.	7480	2/27	28	6.6	9.8	8.1
#Lemhi Ridge	Mont.	8100	2/27	30	7.7	10.3	8.9*
Mill Creek Summit		8800	3/1	58	18.6	12.1	20.3
Moose Creek		6200	2/29	35	9.6	14.8	15.6
Morgan Creek		7580	3/1	37	10.4	9.6	12.8
Perreau Meadows		8000	2/29	44	12.2	12.4	--

*(b) 1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow water equivalent (K) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
Redfish Lake Flat	6550	2/28	38	11.9	7.6	8.9*
#Rock Flat Summit	5340	2/27	42	13.8	16.2	16.7
#Secesh Summit	6520	2/23	97	30.8	26.0	30.9*
#Squaw Flat	6240	2/24	65	20.4	--	--
#Squaw Meadow	5900	2/23	92	32.1	26.7	31.9
Twin Peaks (A)	9170	3/1	61	19.6	12.9	23.0*
Vienna Mine	8950	2/27	96	35.0	24.0	32.1
Williams Creek Summit	7800	2/29	32	9.1	9.2	11.1
LEMHI RIVER						
Above Gilmore	8250	3/1	28	7.6	6.6	8.2
Aspen-Hall Pass (A)	8110	3/1	37	10.4	6.9	8.5*
Copes Camp	7500	3/1	29	7.4	6.0	6.6
Hall Creek	7560	3/1	27	6.9	4.6	4.8*
Meadow Lake	9200	3/1	44	12.6	13.7	16.5
Schwartz Lake	8500	3/1	38	10.7	8.5	10.8*
MIDDLE SNAKE RIVER BASIN - NORTHSIDE						
LITTLE LOST RIVER						
Fairview Guard Station	6750	2/27	16	5.4	5.4	4.2
Hilts Creek	8000	2/28	35	10.2	6.7	--
Lost Garfield	6600	2/27	14	4.0	4.6	3.7
Moonshine	7500	2/27	28	8.5	7.7	9.3
Sawmill Canyon	6900	2/27	26	7.0	7.1	6.9
Wet Creek Summit	7760	2/28	32	9.7	7.8	10.7
BIG LOST RIVER						
Bear Canyon	7920	2/28	56	16.8	9.8	15.9
Copper Basin	7650	2/28	26	8.5	4.6	8.4
Dry Fork	7340	2/29	44	14.6	--	14.6*
Fishpole Lake	9350	2/28	68	23.2	10.8	17.3*
Iron Bog	7650	2/29	41	13.4	8.1	12.8*
Leadbelt	6800	2/29	32	9.8	5.8	8.6
#Leatherman Pass (A)	9800	3/1	48	13.7	--	20.2*
Lost-Wood Divide	7900	3/4	63	20.2	12.3	20.4*
Stickney Mill	7450	3/4	34	9.7	6.8	8.3
FISH CREEK						
Iron Mine Creek	6370	2/28	36	11.1	10.4	9.9
Telfer Ranch	6000	2/28	25	9.2	7.8	7.8

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent (R) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [b]
LITTLE WOOD RIVER						
#Bear Canyon	7920	2/28	56	16.8	9.8	15.9
Garfield Ranger Station	6560	2/29	36	11.5	7.8	9.8
Muldoon	6300	2/29	24	8.2	7.0	7.6
Swede Peak	7640	2/29	54	16.5	10.5	15.2
BIG WOOD RIVER						
Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
Chimney Creek	6400	2/27	46	15.5	10.7	--
#Couch Summit	6850	2/28	61	19.0	9.9	16.9*
Dollarhide Summit	8400	2/27	69	22.6	15.0	21.1
Galena	7300	2/26	52	16.0	12.1	17.0
Galena Summit	8780	2/26	63	19.0	13.5	20.6
Graham Ranch	6280	2/26	45	13.5	9.0	12.8
Hyndman Creek	7440	2/28	49	14.3	9.5	--
#Lost-Wood Divide	7900	3/4	63	20.2	12.3	20.4*
Mascot Mine	7760	2/28	45	13.5	9.2	13.1
Mount Baldy	9000	2/28	66	18.6	11.6	18.4
Soldier Ranger Station	6100	2/28	36	12.1	8.5	11.5
#Vienna Mine	8950	2/27	96	35.0	24.0	32.1
CANYON CREEK						
Bennett Mountain	6650	2/27	48	14.4	12.2	15.0*
#Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
Little Camas Flat	4950	2/27	16	5.2	5.1	5.9*
BOISE RIVER						
Atlanta Summit	7500	2/27	92	29.9	22.4	31.2*
Bad Bear	5500	2/28	34	11.8	11.5	13.5
#Bennett Mountain	6650	2/27	48	14.4	12.2	15.0*
#Bogus Basin	6340	2/28	62	22.2	17.5	20.7
Bogus Basin Road	5520	2/28	6	2.3	8.5	5.8
#Camas Creeks Divide	5720	2/27	34	10.6	9.4	10.0*
#Chimney Creek	6400	2/27	46	15.5	10.7	--
Couch Summit	6850	2/28	61	19.0	9.9	16.9*
Deadman Gulch	5600	3/1	49	16.2	14.0	14.7*
#Dollarhide Summit	8400	2/27	69	22.6	15.0	21.1
Graham Guard Station	5690	2/27	40	13.5	12.0	--
Jackson Peak	7070	2/27	85	28.4	20.7	27.3
#Little Camas Flat	4950	2/27	16	5.2	5.1	5.9*
Moores Creek Summit	6100	2/28	82	29.5	21.7	28.6
Prairie	4800	2/27	11	3.7	5.2	5.8
#Soldier Ranger Station	6100	2/28	36	12.1	8.5	11.5
Trinity Mountain	7780	2/27	105	38.8	26.6	38.2
#Vienna Mine	8950	2/27	96	35.0	24.0	32.1

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SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average b/
PAYETTE RIVER						
Banner Summit	7040	2/27	78	26.4	20.0	--
Bear Basin	5350	2/27	47	14.8	--	--
#Big Creek Summit	6600	2/25	105	34.5	23.8	31.6
Bogus Basin	6340	2/28	62	22.2	17.5	20.7
#Brundage Mountain	7560	2/27	109	41.6	29.8	40.6*
Cozy Cove	5400	2/27	43	14.4	13.0	15.2*
Crawford Ranger Station	4800	2/25	19	7.0	5.8	7.7
#Deadman Gulch	5600	3/1	49	16.2	14.0	14.7*
Deadwood Airstrip	5440	2/27	43	14.1	13.0	14.4
Deadwood Summit	7000	2/27	118	40.9	28.5	41.3*
#Jackson Peak	7070	2/27	85	28.4	20.7	27.3
Lake Fork	6000	2/24	39	10.9	11.9	14.6
Rock Flat Summit	5340	2/27	42	13.8	16.2	16.7
Secesh Summit	6520	2/23	97	30.8	26.0	30.9*
#Squaw Flat	6240	2/24	65	20.4	--	--
Squaw Meadow	5900	2/23	92	32.1	26.7	31.9
Tripod Summit	5200	2/25	48	15.2	13.8	16.7
WEISER RIVER						
Boulder Creek	5500	2/29	41	14.0	20.3	21.8
Placer Creek	6000	2/27	48	13.4	12.3	16.5
Squaw Flat	6240	2/24	65	20.4	--	--
MANN CREEK						
Bear Saddle	6180	2/28	58	22.0	--	--
Mann Creek	6080	2/28	52	19.4	19.2	22.5*
Robinson Creek Ridge	6220	2/28	48	19.2	17.2	18.4*
Sturgill Ridge	6680	2/28	64	23.8	25.2	26.1*
Thorson Cabin	5320	2/28	34	14.0	14.4	12.3*
MIDDLE SNAKE RIVER BASIN - SOUTHSIDE						
RAFT RIVER						
Boy Scout Camp	7750	2/27	48	15.0	11.3	12.8
Clear Creek Meadows Utah	9050	2/27	53	16.8	19.6	19.1
Howell Canyon	7980	2/27	66	20.9	17.7	22.1
Indian Grove	7560	2/27	42	12.4	11.0	--
Logger Springs	8100	2/27	54	16.6	14.5	--
One Mile Summit Utah	7330	2/27	20	5.2	6.6	6.1
Sublett	6000	2/27	30	9.3	11.3	10.1

*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [b]
GOOSE CREEK							
Badger Gulch		6660	2/27	41	12.9	11.4	10.7
Bostetter Ranger Station		7500	2/27	56	17.5	17.6	17.1
#Indian Grove		7580	2/27	42	12.4	11.0	--
#Logger Springs		8120	2/27	54	16.6	14.5	--
Vi Pont	Utah	7670	2/27	47	14.8	15.5	12.9*
SALMON FALLS CREEK							
#Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
Cedar Creek		7000	3/1	28	8.8	12.3	9.3
Deadline		6900	3/1	73	25.2	22.4	18.8
#Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Goat Creek	Nev.	8800	3/1	53	17.5	13.0	15.7
#Hummingbird Springs	Nev.	8940	3/1	71	22.4	16.7	19.5
Magic Mountain		6700	3/1	53	17.3	20.3	16.4
#Pole Creek Rgr. Sta.	Nev.	8330	3/1	54	17.8	17.6	18.6
Shoshone Basin		5740	3/1	19	6.7	11.0	5.3
Wilson Creek		7500	3/1	40	11.5	14.5	11.0
BRUNEAU RIVER							
Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Hummingbird Springs	Nev.	8940	3/1	71	22.4	16.7	19.5
Pole Creek Rgr. Sta.	Nev.	8330	3/1	54	17.8	17.6	18.6
#Seventy-six Creek	Nev.	7100	3/1	41	11.6	13.8	10.4
OWYHEE RIVER							
Antelope Ridge		6150	2/26	17	6.0	8.9	6.9*
#Bear Creek	Nev.	7800	3/1	63	20.0	17.0	18.0*
#Fox Creek	Nev.	6800	3/1	32	10.2	10.5	9.7
Mud Flat		5720	2/26	19	6.5	8.6	6.0*
#Seventy-six Creek	Nev.	7100	3/1	41	11.6	13.8	10.4
Silver City		6400	2/26	48	16.3	16.6	13.7
South Mountain		6340	2/26	48	15.6	15.0	11.6

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SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average [b]
UPPER SNAKE RIVER BASIN							
CAMAS-BEAVER CREEKS							
Camp Creek		6800	2/28	27	6.0	7.3	9.8
Kilgore		6200	2/27	30	8.6	10.5	10.6
HENRYS FORK RIVER							
Big Springs		6400	2/26	49	14.4	18.1	18.7
Grassy Lake	Wyo.	7230	2/27	75	24.3	34.3	30.6
Island Park		6290	2/26	44	12.9	16.4	15.1
Sawtell Mountain		8720	2/26	86	28.6	23.6	28.4*
Targhee Pass		7000	2/27	33	9.0	11.8	13.6*
Valley View		6740	2/27	40	11.7	14.9	15.6
White Elephant		7700	2/26	69	21.2	18.7	18.4*
TETON RIVER							
Darby Canyon	Wyo.	8250	2/25	54	16.7	19.6	19.8*
Freds Mountain	Wyo.	8150	2/28	59	18.0	20.9	16.9*
Indian Meadows	Wyo.	8240	2/27	82	25.7	32.3	30.9*
Jackpine Creek	Wyo.	7350	2/27	54	15.5	21.0	19.6*
McRenolds Reservoir		6800	2/27	48	13.8	19.8	17.4*
Phillips Bench	Wyo.	8200	2/26	70	20.7	30.4	23.2*
Pine Creek Pass		6750	2/28	37	10.7	20.0	15.6
State Line		6650	2/28	34	10.1	16.3	12.7
Teton Pass W.S.	Wyo.	8400	2/26	61	17.4	28.3	21.0*
WILLOW CREEK							
Aspen Grove		6500	2/28	43	13.1	11.3	10.7*
Blue Ridge		6800	2/29	55	18.1	14.3	--
Bone		6200	2/29	21	7.2	9.9	7.4*
Brockman Station		6430	2/29	29	9.3	13.0	--
Hell Creek		7100	2/28	45	12.6	15.5	--
Mud Creek		7150	2/29	67	19.2	11.9	--
Sheep Mountain		6570	2/29	38	11.7	11.2	12.5*
Tex Creek		6650	2/28	32	9.0	10.5	8.5*
BLACKFOOT RIVER							
Austin Bros. Ranch		6400	3/3	28	9.4	11.0	8.3
Johnson Creek		6730	3/3	46	13.6	--	--

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SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
Slug Creek Divide	7230	2/27	54	16.7	14.8	14.8
Somsen Ranch	7000	3/3	48	14.4	17.8	12.7
Sulphur Peak	7070	3/3	51	15.5	--	--
Wood Canyon Divide	7450	3/3	56	16.9	--	--
PORTNEUF RIVER						
Beaverdam	6120	3/1	27	8.8	--	--
Dempsey Creek	6100	3/1	40	12.0	11.6	11.0
East Creek	7000	3/1	34	11.1	--	--
Johnson Creek	6730	3/3	46	13.6	--	--
Lower Pebble	5800	3/1	42	12.6	15.5	12.3*
Mink Creek	6300	3/2	55	18.0	14.1	15.5
Pebble Creek	6550	3/1	52	16.5	15.4	14.5
Sedgwick	7850	3/1	58	16.9	--	--
#Sulphur Peak	7070	3/3	51	15.5	--	--
#Wood Canyon Divide	7450	3/3	56	16.9	--	--

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UPPER SNAKE RIVER BASIN							
CAMAS-BEAVER CREEKS							
Camp Creek		6800	2/28	27	6.0	7.3	9.8
Kilgore		6200	2/27	30	8.6	10.5	10.6
HENRYS FORK RIVER							
Big Springs		6400	2/26	49	14.4	18.1	18.7
Grassy Lake	Wyo.	7230	2/27	75	24.3	34.3	30.6
Island Park		6290	2/26	44	12.9	16.4	15.1
Sawtell Mountain		8720	2/26	86	28.6	23.6	28.4*
Targhee Pass		7000	2/27	33	9.0	11.8	13.6*
Valley View		6740	2/27	40	11.7	14.9	15.6
White Elephant		7700	2/26	69	21.2	18.7	18.4*
TETON RIVER							
Darby Canyon	Wyo.	8250	2/25	54	16.7	19.6	19.8*
Freds Mountain	Wyo.	8150	2/28	59	18.0	20.9	16.9*
Indian Meadows	Wyo.	8240	2/27	82	25.7	32.3	30.9*
Jackpine Creek	Wyo.	7350	2/27	54	15.5	21.0	19.6*
McRenolds Reservoir		6800	2/27	48	13.8	19.8	17.4*
Phillips Bench	Wyo.	8200	2/26	70	20.7	30.4	23.2*
Pine Creek Pass		6750	2/28	37	10.7	20.0	15.6
State Line		6650	2/28	34	10.1	16.3	12.7
Teton Pass W.S.	Wyo.	8400	2/26	61	17.4	28.3	21.0*
WILLOW CREEK							
Aspen Grove		6500	2/28	43	13.1	11.3	10.7*
Blue Ridge		6800	2/29	55	18.1	14.3	--
Bone		6200	2/29	21	7.2	9.9	7.4*
Brockman Station		6430	2/29	29	9.3	13.0	--
Hell Creek		7100	2/28	45	12.6	15.5	--
Mud Creek		7150	2/29	67	19.2	11.9	--
Sheep Mountain		6570	2/29	38	11.7	11.2	12.5*
Tex Creek		6650	2/28	32	9.0	10.5	8.5*
BLACKFOOT RIVER							
Austin Bros. Ranch		6400	3/3	28	9.4	11.0	8.3
Johnson Creek		6730	3/3	46	13.6	--	--

*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average b/
Slug Creek Divide	7230	2/27	54	16.7	14.8	14.8
Somsen Ranch	7000	3/3	48	14.4	17.8	12.7
Sulphur Peak	7070	3/3	51	15.5	--	--
Wood Canyon Divide	7450	3/3	56	16.9	--	--
PORTNEUF RIVER						
Beaverdam	6120	3/1	27	8.8	--	--
Dempsey Creek	6100	3/1	40	12.0	11.6	11.0
East Creek	7000	3/1	34	11.1	--	--
Johnson Creek	6730	3/3	46	13.6	--	--
Lower Pebble	5800	3/1	42	12.6	15.5	12.3*
Mink Creek	6300	3/2	55	18.0	14.1	15.5
Pebble Creek	6550	3/1	52	16.5	15.4	14.5
Sedgwick	7850	3/1	58	16.9	--	--
#Sulphur Peak	7070	3/3	51	15.5	--	--
#Wood Canyon Divide	7450	3/3	56	16.9	--	--

*(b) 1963--77, 15 year period. #Not located directly on this drainage. * Estimated 1963--77 15 year Average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
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NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
GREAT BASIN						
BEAR RIVER						
Emigrant Summit	7380	2/27	72	22.8	23.3	21.7
Emigration Canyon	6500	2/27	36	11.3	12.4	9.7
MONTPELIER CREEK						
Giveout	6840	2/27	43	12.1	12.6	11.1
Little Beaver	6970	2/27	46	13.2	15.6	14.0
Lower Home Canyon	7640	2/29	48	13.1	13.2	12.2*
Montpelier Creek	6570	2/27	27	8.7	10.4	7.5
Upper Home Canyon	8560	2/29	71	20.7	20.0	19.9*
Whiskey Flat	6960	2/27	32	9.8	9.0	8.5
MINK CREEK						
Christensen Ranch	5400	2/26	29	10.1	10.9	7.9
Dry Basin	7900	2/26	87	28.9	26.9	24.2*
#Emigrant Summit	7380	2/27	72	22.8	23.3	21.7
Horseshoe Basin	8000	2/26	79	27.6	22.5	22.0*
Liberty Spring	8600	2/26	97	34.0	35.0	32.7
Strawberry Creek	5800	2/27	29	9.6	13.6	9.6
Strawberry Mink Divide	6800	2/26	59	21.4	22.0	18.7
CUB RIVER						
Cub River Rgr. Sta.	5400	2/26	25	9.1	11.5	8.4
#Franklin Basin	8000	2/26	68	23.3	22.6	22.7
Willow Flat	6100	2/26	43	15.6	19.9	13.9
Worm Creek	6660	2/26	57	19.5	19.7	--
MALAD RIVER						
Cliff Canyon	7200	2/26	23	8.2	8.6	--
Daniels Creek	6400	2/26	19	7.5	7.7	--
Dry Creek Flat	6480	2/26	27	10.6	10.7	7.4
Lower Elkhorn	7000	2/26	45	16.9	14.5	12.7*
Oxford Mountain	6800	2/26	34	11.6	13.1	9.4
Upper Elkhorn	7100	2/26	61	20.0	18.2	16.4*

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Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
- Forest Service
- Agricultural Research Service
- Statistical Reporting Service

U.S. Department of Commerce
- NOAA, National Weather Service

U.S. Department of the Interior
- Bonneville Power Administration
- Bureau of Reclamation
- Fish and Wildlife Service
- Water Resources Division, Geological Survey
- National Park Service
- Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

APR 21 1980
University of Illinois
at Urbana-Champaign

AS OF
APR. 1, 1980

USDA SCS PORTLAND OR 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

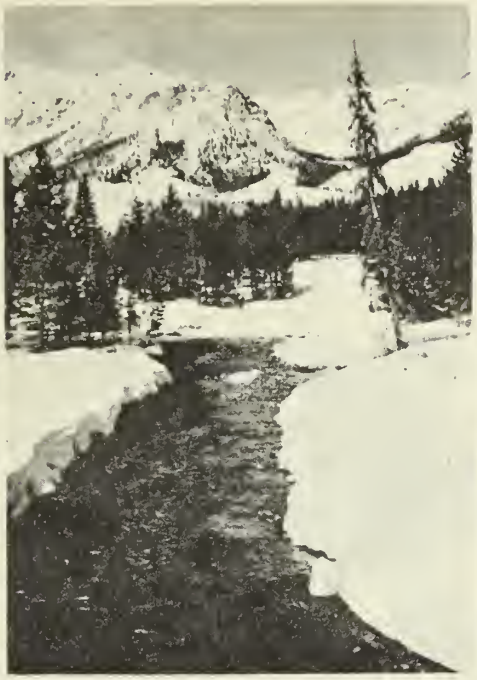
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR APRIL 1, 1980

The water supply outlook for the 1980 season is good to excellent for the Snake River and its tributaries upstream from the Salmon River, poor for the Clearwater and Spokane drainages, very poor for the Palouse River area and fair to good on the Priest and Pack Rivers. Forecasts of April through September runoff range from a low of 67% of normal for the Spokane River at Post Falls to a high of 118% of average for Salmon Falls Creek near San Jacinto, Nevada. The Owyhee Reservoir inflow in Eastern Oregon is forecast at 128% of normal.

Snow accumulation throughout the state was near to well above normal during April.

In Northern Idaho accumulated snowcover is well below normal on the Clearwater (74%) and Spokane (65%) watersheds, critically low at 39% on the Palouse and other low elevation streams, but near normal (94%) on the Priest River drainage.

In general, all watersheds south of the Snake River have above to well above normal snow pack, and the northern tributaries and upper Snake watershed in Wyoming are near to slightly above average. Snow water equivalent in southern Idaho ranged from 95% of average on the Little Lost watershed to 133% of normal on the Jordan Creek drainage, a tributary of the Owyhee River in Southwestern Idaho.

Reservoir storage in general is good with a combination of sixteen irrigation reservoirs in the Snake River Basin reporting 74% of capacity which is 104% of average storage.

The National Weather Service reported above normal precipitation for the third month in a row. March precipitation was 123% of normal for the state, ranging from 78% of average at Kellogg and 88% at Portland to 195% At Ashton and 212% at Boise. Temperatures for March averaged near normal across Idaho.

Upper Columbia Tributaries

Priest River: Snow water equivalent of the snow pack is 94% of average with April-July runoff forecast at 88% of normal.

Kootenai River: Snowcover of 83% of normal and April-September streamflow forecast at 84% of average at Leonia.

Clark Fork-Pend Oreille River: Water content of the snow pack is 81% of average and April-September streamflow forecast at 71 percent of normal at Whitehorse Rapids. A combination of storage in four large reservoirs in the drainages shows 54% of capacity and 106% of average stored water. Major reservoirs are expected to fill.

Spokane River: Snow water equivalent for the watershed is 65% of average with April-September runoff at Post Falls forecast for 67% of normal. Lake Coeur d'Alene contains only 39% of average stored water or 58% of normal; however the lake is expected to fill with normal spring conditions.

Lower Snake River Drainages

Palouse River: The water content of the snow pack is only 39% of normal, and well below average to critically low runoff can be expected.

Clearwater River: Snow water equivalent for the basin is 74% of average with April-September runoff at Spalding forecast at 69% of normal.

Salmon River: Snow pack water content for the entire basin stands at 98% of average, ranging from 72% at low elevations to 120% at high elevations. April-September runoff is forecast at 84% of normal for the Salmon River at Whitebird.

Snake River Basin - Northern Tributaries

Lost River: Snow water equivalent on the Little Lost watershed is 95% of average with 86% of normal runoff forecast for the April-September period. The snow pack on the Big Lost drainage is 104% with an April-September runoff forecast of 86% of average. Mackay Reservoir content is 66% of capacity or 89% of average storage and is expected to fill.

Wood Rivers: The water content of the snow pack on Fish Creek is 123% of normal with excellent runoff expected and the reservoir should fill. Snow cover on the Little Wood drainage is 115% of average, April-September runoff forecast at 112% of normal and the Little Wood Reservoir should fill. Snow water equivalent on the Big Wood Watershed is 97% of average with an April-September runoff forecast at 86% of normal. Magic Reservoir contents are 38% of average and 26% of capacity. Filling of the reservoir could be marginal depending on weather conditions and irrigation demands during the snow melt season.

Canyon Creek: Snow water equivalent on the watershed is 107% of normal with average or better runoff in prospect.

Boise River: Snow pack water content is 106% of average with normal runoff forecast for April-September period. The four reservoirs on the Boise system contain 101% of average or 64% of capacity stored water and can be expected to fill, depending somewhat on climatic conditions and irrigation demands during the melt season.

Payette River: Snow water equivalent for the watershed is 109% of average with April-September runoff forecast at 108% of normal. Contents of the two major reservoirs on the drainage is 95% of average or 46% of capacity and are expected to fill.

Weiser River: Snow pack water content is 98 percent of average with March-September runoff forecast at 98% of normal. Mann Creek reservoir is now full.

Snake River Basin - Southern Tributaries

Raft River: Water content of the snow pack is normal with slightly below average runoff in prospect.

Goose-Trapper Creeks: Snow water equivalent is at 110% of average with a March-September runoff forecast of 105% of normal. Oakley Reservoir contents are 129% of average or 57% of capacity and should fill depending upon climatic conditions and irrigation demands during the snow melt season.

Salmon Falls Creek: The snow pack has a water equivalent of 123% of normal and runoff is forecast at 116% of average for the March-September period. Salmon Falls Reservoir is only 30% of capacity and 85% of average. The reservoir will not fill, however adequate storage can be expected.

Bruneau River: Snow water equivalent for this watershed is 118% of average with March-September runoff forecast at 109% of normal.

Owyhee River: The watershed has an excellent snow pack of 148% of normal and the forecast for net inflow into Owyhee Reservoir for the April-September period is 128% of average.

Upper Snake River Basin

Upper Snake River: The Snake River Basin in Wyoming has an average snow pack of 95% with tributary values ranging from 85% of normal on the Pacific Creek drainage to 110% of average on the Salt River watershed. The April-September inflow to Palisades Reservoir is 87% of normal. Combined contents of the five major reservoirs on the Snake River above American Falls is 109% of average and 89% of capacity. All reservoirs are expected to fill.

Camas-Beaver Creeks: The watersheds above Mud Lake have an 88% of normal snow pack which should produce a slightly below average runoff.

Henry's Fork River: Water content of the snow pack on this drainage is 90% of normal with April-September runoff forecast at 86 percent of average.

Teton River: This basin has 95% of average snow water equivalent and seasonal flow is expected to be slightly below normal.

Willow Creek: Snow pack on the watershed is 113% of average with a probability of normal or above runoff. Ririe Reservoir is 52% of capacity and will fill.

Blackfoot River: Snow water equivalent on the drainage is 105% of normal and near average seasonal runoff is expected.

Portneuf River: The watershed has 114% of average snow pack and 97% of normal runoff is forecast for the March-September period. Reservoirs on the drainage are expected to fill.

Great Basin

Bear River: The watershed above Bear Lake has 122% of normal snow water equivalent and the April-September seasonal runoff is forecast at 105% of average. Bear Lake contents is 73% of capacity which is average for the first of April.

Montpelier Creek: Snow cover water equivalent is 104% of average with an April-September forecast of 118% of normal. Montpelier Creek Reservoir is expected to fill.

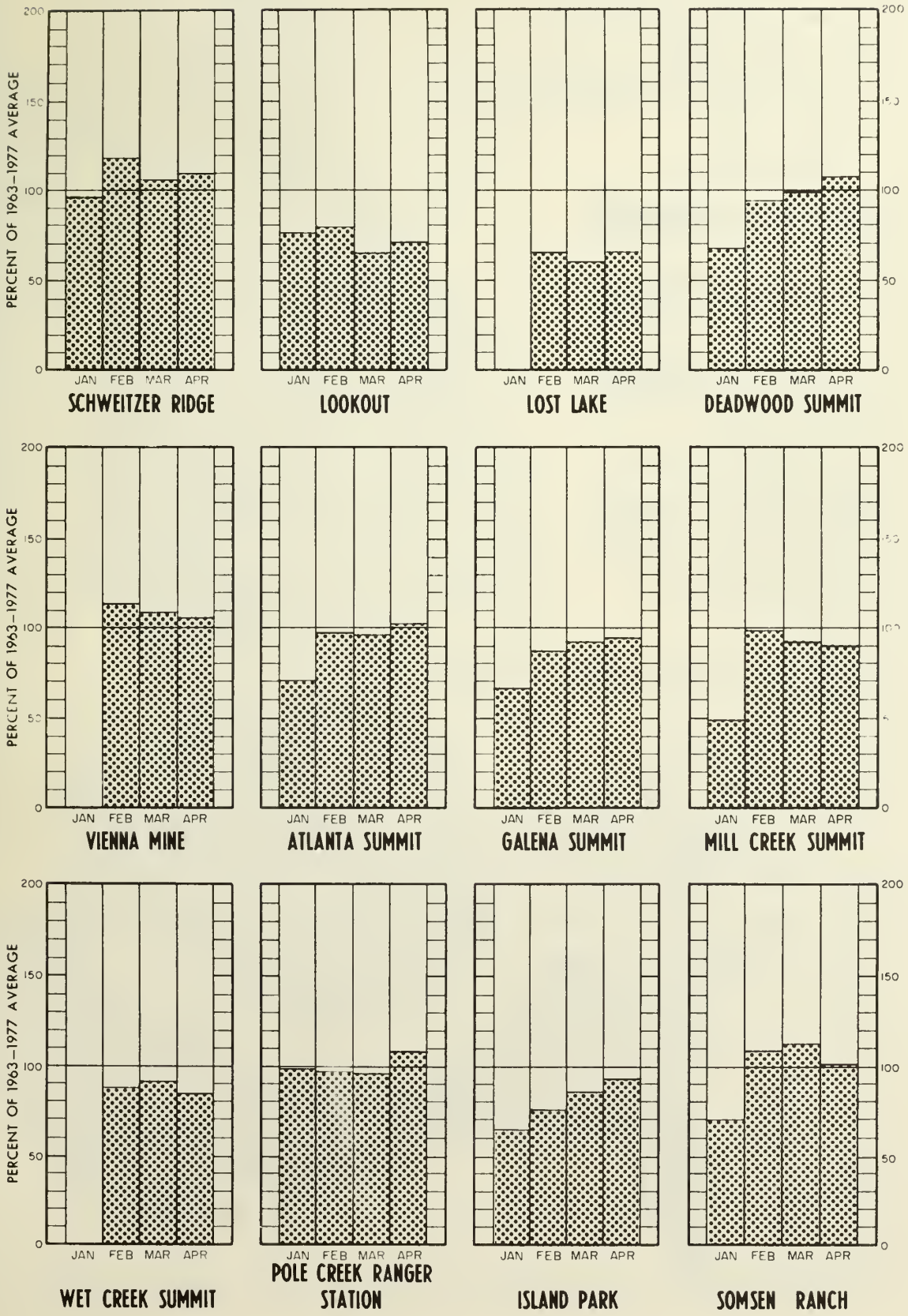
Mink Creek: The snow pack is 125% of average and above normal seasonal runoff is the outlook.

Cub River: The drainage has 126% of normal snow water equivalent with seasonal runoff forecast at 116% of average.

Malad River: Snow water equivalent for the watershed is 132% of average and above normal runoff can be expected.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

APRIL 1, 1980



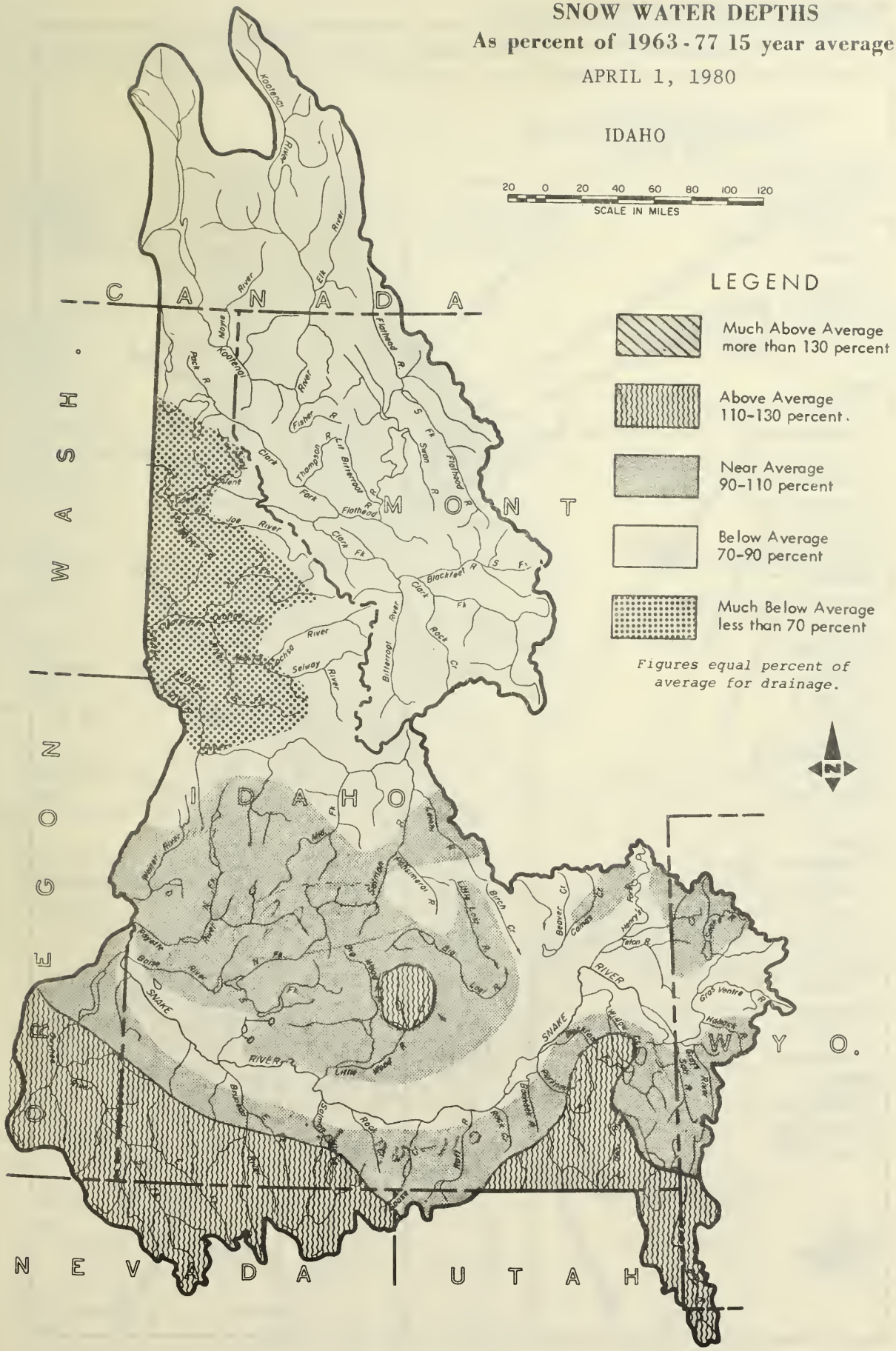
COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF	
		LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	37	116	83
Pend Oreille River	106	88	81
Clark Fork River	48	84	81
Flathead River	33	93	81
Priest River	4	128	94
Spokane River	15	78	65
Hayden Creek	4	50	--
LOWER SNAKE RIVER BASIN			
Palouse River	5	41	39
Clearwater River	21	89	74
Salmon River	27-28	131	98
Lemhi River	6	117	96
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	5-6	105	95
Big Lost River	8	157	104
Fish Creek	2	137	123
Little Wood River	4	167	115
Big Wood River	11-13	145	97
Boise River	17	149	106
Canyon Creek	3	165	107
Payette River	14	146	109
Weiser River	6	116	98
Mann Creek	4	117	99
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	5-7	119	100
Goose-Trapper Creek	3-5	112	110
Salmon Falls Creek	10	138	123
Bruneau River	5	143	118
Owyhee River	6	108	148
Jordan Creek	3	128	133
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Res.	34	93	95
Camas-Beaver Creeks	3	98	88
Henrys Fork River	11	90	90
Teton River	7	92	95
Willow Creek	5-9	104	113
Blackfoot River	3	98	105
Portneuf River	4	100	114
GREAT BASIN			
Bear River - Upper	6	121	122
Bear River - Lower	13	112	118
Montpelier Creek	6	97	104
Mink Creek	7	118	125
Cub River	3	110	126
Malad River	4-6	120	132

SNOW WATER DEPTHS

As percent of 1963-77 15 year average

APRIL 1, 1980



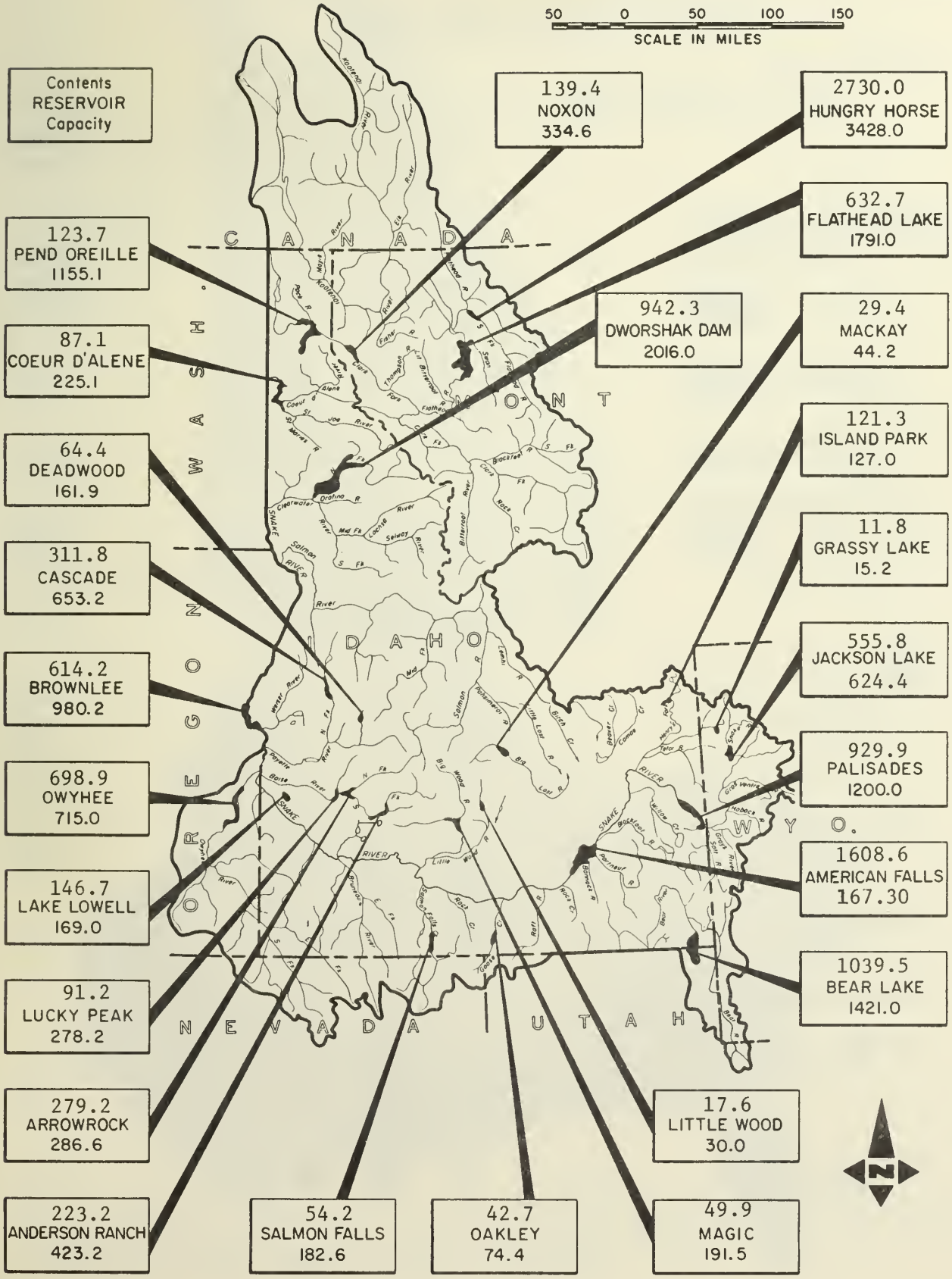
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2730.0	2187.0	2016.0
Flathead	1791.0	632.7	664.7	775.7
Pend Oreille	1155.1	123.7	168.1	432.9
Noxon	334.6	139.4	320.8	191.9
Spokane				
Coeur d'Alene	225.1	87.1	152.1	149.9
SNAKE BASIN				
Snake				
Jackson Lake	624.4	555.8	531.9	612.9
Palisades	1200.0	929.9	804.3	815.9
American Falls	1673.0	1608.6	1548.0	1390.8
Island Park	127.0	121.3	99.8	122.5
Grassy Lake	15.2	11.8	12.9	10.8
Brownlee	980.2	614.2	706.1	395.5
Goose-Trapper Creeks				
Oakley	74.4	42.7	42.8	33.1
Salmon Falls Creek				
Salmon Falls	182.6	54.2	45.5	63.7
Big Lost				
Mackay	44.2	29.4	43.1	32.9
Big Wood				
Magic	191.5	49.9	145.6	129.9
Little Wood				
Little Wood	30.0	17.6	26.5	18.5
Fish Creek				
Carey Valley	14.4	4.7	6.9	--
Boise				
Anderson Ranch	423.2	223.2	327.4	248.5
Arrowrock	286.6	279.2	279.7	226.6
Lucky Peak	278.2	91.2	169.0	115.5
Lake Lowell (Deer Flat)	169.0	146.7	133.2	139.3
Owyhee				
Owyhee	715.0	698.9	650.1	553.2
Payette				
Cascade	653.2	311.8	351.4	305.4
Deadwood	161.9	64.4	88.3	92.0
Weiser				
Mann Creek	11.1	11.1	9.5	--
Clearwater				
Dworshak	2016.0	942.3	457.7	--
GREAT BASIN				
Bear				
Bear	1421.0	1036.2	1390.6	1039.5

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

APRIL 1, 1980

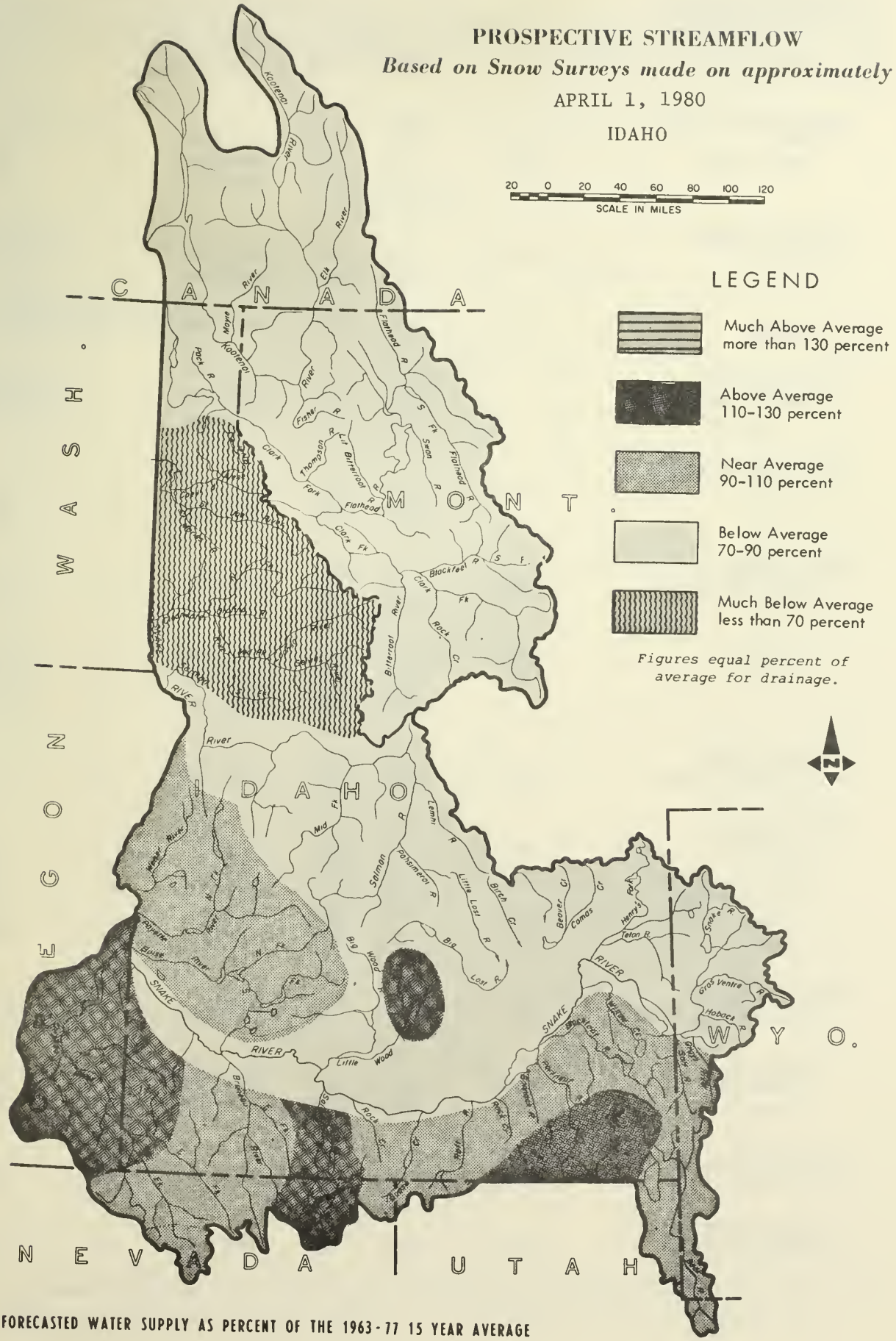


STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	7470	84	Apr-Sep	--	8858
		6500	84	Apr-Jul	--	7708
		5160	84	Apr-Jun	--	6144
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	9780	71	Apr-Sep	--	13781
		8880	71	Apr-Jul	--	12519
		7520	71	Apr-Jun	--	10633
Priest River						
Priest River	(at)	740	88	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls	(at)	2000	67	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	890	68	Apr-Sep	--	1309
		840	68	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran	(at)	780	86	Apr-Sep	--	903
Palisades Inflow		3350	87	Apr-Sep	--	3863
Heise	(nr)	3650	86	Apr-Sep	--	4247
Blackfoot	(nr)	3950	86	Apr-Jul	--	4579
Henrys Fork						
Ashton	(nr)	620	84	Apr-Sep	--	737
Rexburg	(nr)	1320	86	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	105	97	Mar-Sep	--	108
Oakley Reservoir Inflow		38	105	Mar-Sep	--	36
Salmon Falls Creek						
San Jacinto	(nr)	110	116	Mar-Sep	--	95
		105	117	Mar-Jul	--	90
		100	118	Mar-Jun	--	85
Bruneau River						
Hot Springs	(nr)	275	109	Mar-Sep	--	251

(c) Assuming normal meteorological conditions.

† 1963-1977 period.



FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Little Lost River						
Howe	(nr)	38	86	Apr-Sep	--	44
Wet Creek	(bl)	36	88	Apr-Sep	--	41
		23	88	Apr-Jun	--	26
Big Lost River						
Howell	(at)	200	89	Apr-Sep	--	225
		135	88	Apr-Jun	--	154
Mackay	(nr)	175	86	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		275	86	Apr-Sep	--	319
Inflow		290	87	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	120	112	Apr-Sep	--	107
		100	115	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	750	102	Apr-Sep	--	733
		680	101	Apr-Jul	--	676
Boise	(nr)	1700	100	Apr-Sep	--	1695
		1370	100	Apr-Jun	--	1369
		1550	100	Apr-Jul	--	1545
South Fork						
Anderson Dam	(at)	620	100	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev.	(nr)	25	109	Apr-Jul	--	22
Owyhee, Nev.	(nr)	82	103	Apr-Jul	--	80
Lake Owyhee		500	128	Apr-Sep	--	332*
Net inflow		467	128	Apr-Jul	--	431*
Rome	(at)	462	128	Apr-Jul	--	361*
Payette River						
Horseshoe Bend	(nr)	2000	108	Apr-Sep	--	1860
North Fork						
Cascade	(at)	620	110	Apr-Sep	--	564
Banks	(nr)	790	109	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	550	98	Mar-Sep	--	558
Salmon River						
Whitebird	(at)	6050	84	Apr-Sep	--	7196

(c) *Assuming normal meteorological conditions.*

† 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Clearwater River						
Spalding*	(at)	5980	69	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	350	105	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	14.6	118	Apr-Sep	--	12.4*
Cub River						
Preston	(nr)	58	116	Apr-Sep	--	50.0

(c) Assuming normal meteorological conditions.

† 1963-1977 period.

* National Weather Service forecast.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter March 1980		Fall-Winter Nov. 79 - Mar. 80	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	1.87	+ .13	11.32	- 2.07
Flathead	1.58	+ .05	8.47	- 2.26
Clark Fork	1.33	+ .11	6.34	- 1.66
Pend Oreille-Spokane	2.45	- .08	13.37	- 4.18
Upper Snake	2.22	+ .70	9.19	- .92
Snake River Plain	.79	+ .01	5.52	+ .44
Salmon-Payette-Boise	2.08	+ .35	10.63	- 1.16
Clearwater	3.02	+ .06	14.06	- 3.82
Owyhee-Malheur	1.00	+ .15	5.68	+ .01

1/ Preliminary analysis and data by the National Weather Service and Meterological Service of Canada.

2/ Departure from 15-year (1963-77) drainage division average.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average ½
UPPER COLUMBIA RIVER BASIN						
KOOTENAI RIVER						
#Bear Mountain	5400	3/25	122	47.6	45.7	64.2*
Halverson Creek	4850	3/25	106	41.2	35.0	44.2*
Smith Creek	4800	3/26	105	39.6	31.4	48.8
PEND OREILLE - PRIEST RIVER						
Bear Mountain	5400	3/25	122	47.6	45.7	64.2*
Benton Meadow	2370	3/27	11	4.6	5.0	5.0
Benton Spring	4900	3/27	48	15.9	16.6	20.2
#Mosquito Ridge	5110	3/28	79	28.2	31.0	40.2
Schweitzer Bowl	4500	3/26	65	25.1	22.8	30.9*
Schweitzer Ridge	6200	3/26	123	52.4	32.0	47.8*
HAYDEN LAKE						
Chilco Ridge	3650	3/28	8	2.3	6.2	--
Conie Ridge	3900	3/28	10	2.9	8.6	--
Corner Creek	3150	3/27	16	4.5	8.9	--
Sage Creek Saddle	4100	3/28	37	11.3	18.4	--
SPOKANE RIVER						
Above Burke	4100	3/31	52	17.4	22.1	24.7*
Above Roland	4350	3/28	71	25.4	32.6	35.2*
Below Roland	3840	3/28	31	12.4	17.2	16.5*
Copper Ridge	4800	3/28	36	10.2	26.8	29.7
#Forty-nine Meadows	4840	3/28	66	19.7	24.7	32.5
Fourth of July Summit	3200	3/26	11	3.9	8.5	8.8
Granite Peak	6000	3/28	111	33.8	36.5	46.8
Kellogg Peak	5560	3/28	75	25.0	27.8	35.4
Lookout	5120	3/31	82	26.4	32.4	37.1
#Lost Lake	6080	3/28	127	40.3	40.5	61.8*
Lower Sands Creek	3400	3/28	37	11.5	19.2	21.9
Mosquito Ridge	5110	3/28	79	28.2	31.0	40.2
Roland Summit	5200	3/28	84	30.2	37.4	40.1*
Sherwin	3200	3/27	22	6.7	14.0	13.8
Sunset	5600	3/28	68	23.8	32.0	36.2
LOWER SNAKE RIVER BASIN						
PALOUSE RIVER						
Crumarine Creek	3340	3/26	0	0.0	2.0	4.4
East Twin	4050	3/26	14	4.2	11.4	9.8

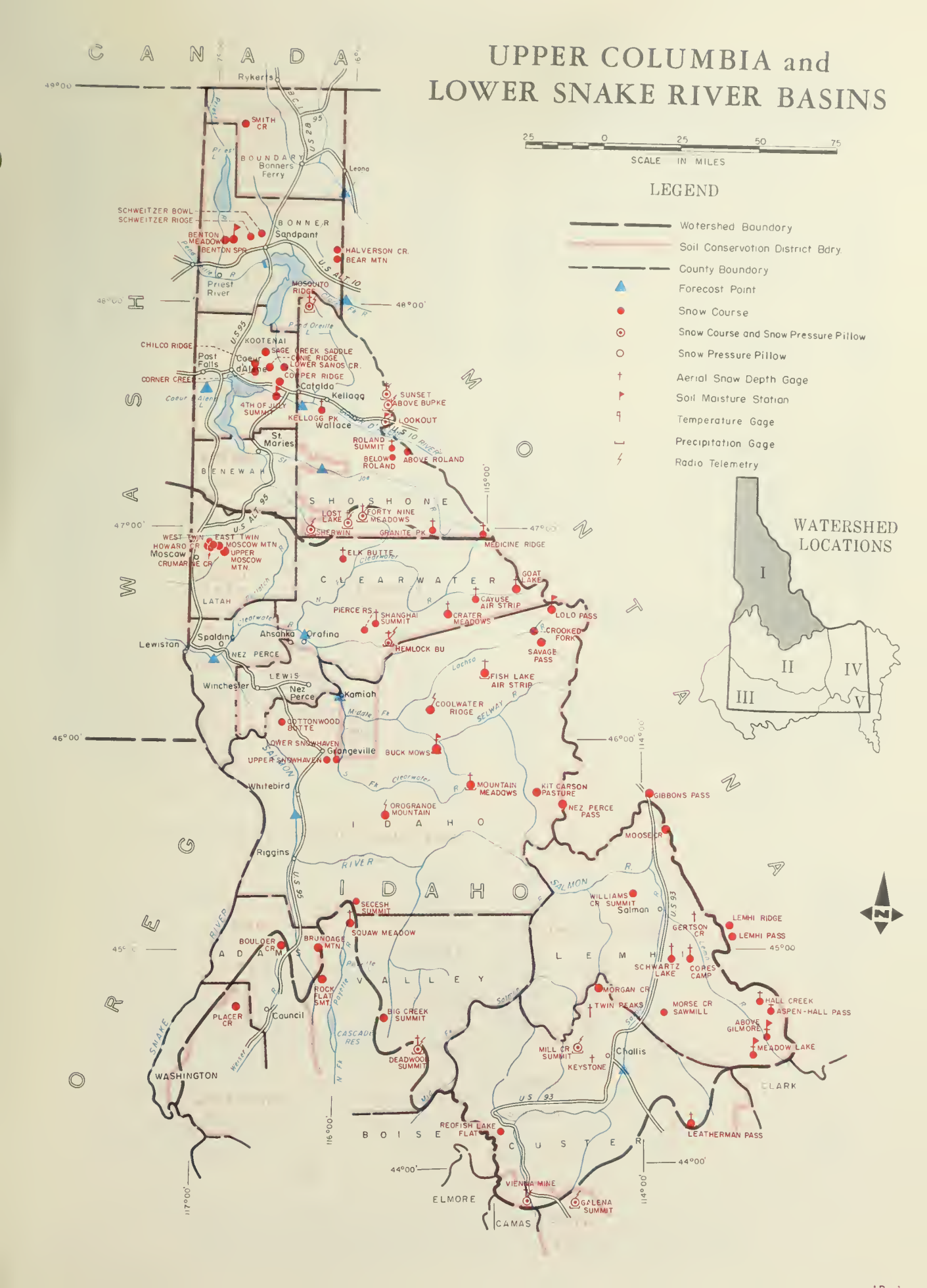
*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
Howard Creek		3500	3/26	3	0.7	2.7	3.0*
Moscow Mountain		4360	3/26	35	11.0	20.0	18.0
West Twin		4250	3/26	6	2.0	5.7	9.1
CLEARWATER							
Breezy Saddle		5000	3/28	74	21.6	25.6	--
Buck Meadows		5650	3/28	77	21.4	23.6	31.2*
Cayuse Airstrip		3500	3/28	21	5.2	9.7	9.8
Coolwater Mountain		6200	3/28	95	28.7	32.0	33.0
Crater Meadows		6100	3/28	107	34.6	37.8	46.3
Crooked Fork		3600	3/28	25	8.5	11.0	14.1*
Elk Butte		5420	3/28	83	25.4	--	38.8
Fish Lake Airstrip		5650	3/28	103	32.0	35.7	41.2
Forty-nine Meadows		4840	3/28	66	19.7	24.7	32.5
Goat Lake		6500	3/28	120	38.2	40.4	49.3
#Granite Peak		6000	3/28	111	33.8	36.5	46.8
Hemlock Butte		5500	3/28	107	35.0	38.9	51.3
#Hoodoo Basin	Mont.	6000	3/31	120	47.2	46.1	53.6*
#Hoodoo Creek	Mont.	5900	3/31	111	42.8	45.1	49.9
Kit Carson Pasture		4950	3/31	26	8.7	9.6	9.1
Lolo Pass		5240	3/28	75	26.3	32.5	32.6
Lost Lake		6080	3/28	127	40.3	40.5	61.8*
Mountain Meadows		6300	3/28	61	16.6	18.0	26.1*
#Nez Perce Pass	Mont.	6575	3/31	43	13.8	18.6	19.0
Pierce Ranger Station		3170	3/28	20	6.9	9.4	10.6
Savage Pass		6170	3/28	69	24.8	27.1	28.6
Shanghai Summit		4600	3/28	55	16.0	23.7	27.2
SALMON RIVER							
#Banner Summit		7040	3/28	87	32.2	21.3	--
Bear Basin		5350	3/28	64	21.5	--	--
Big Creek Summit		6600	3/28	116	41.8	27.5	37.5
Borah (A)		8250	3/29	27	7.3	4.6	--
#Boulder Creek		5500	3/31	54	18.0	19.6	25.1
Brundage Mountain		7560	3/28	130	52.2	35.5	48.6*
#Deadwood Summit		6750	3/28	130	51.1	31.6	47.5
Double Springs Pass (A)		8400	3/29	36	9.7	6.7	11.1*
#Galena Summit		8780	3/31	74	23.7	16.1	25.2
#Gibbons Pass	Mont.	7100	3/31	61	20.4	22.0	24.8
Leatherman Pass		9800	3/29	64	19.8	19.4	26.1*
#Lemhi Pass	Mont.	7480	3/28	34	9.5	10.0	9.9
#Lemhi Ridge	Mont.	8100	3/28	38	10.4	10.6	10.9*
Mill Creek Summit		8800	3/29	64	21.8	15.6	24.1
Moose Creek		6200	3/27	43	12.2	15.8	17.1
Morgan Creek		7580	3/31	45	12.8	11.1	14.9
Morse Creek Sawmill		7120	3/29	37	9.7	--	9.5

*(b) 1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

UPPER COLUMBIA and LOWER SNAKE RIVER BASINS



INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

KOOTENAI RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16A7	I	Halverson Creek	3	57N	3E	4850
16A1	I	Smith Creek	29	64N	3W	4800

PEND OREILLE - PRIEST RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16A8	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4900
16A6	I	Schweitzer Bowl	20	5BN	2W	4500
16A5	I	Schweitzer Ridge	19	58N	2W	6200

HAYDEN CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16B8	I	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Saddle	10	52N	2W	4100

SPOKANE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15BBSP	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	3	46N	6E	3840
16B2	I	Copper Ridge	6	50N	1W	4800
16B3M	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	3	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2MSP	I	Lookout	4	47N	6E	5120
16B1	I	Lower Sands Creek	32	51N	1W	3400
15B4ASP	I	Medicine Ridge	24	43N	10E	6160
16A4ASP	I	Mosquito Ridge	5	54N	2E	5110
15B5A	I	Roland Summit	26	47N	6E	5200
16C1SP	I	Sherwin	28	42N	1E	3200
15B9ASP	I	Sunset	33	49N	5E	5600

LOWER SNAKE BASIN

PALOUSE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16C6	I	Crumarine Creek	24	40N	5W	3340
16C3	I	East Twin	13	40N	5W	4050
16C5	I	Howard Creek	14	40N	5W	3500
16C2	I	Moscow Mountain	18	40N	4W	4400
16C4P	I	West Twin	14	40N	5W	4250

CLEARWATER RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15D5MAP	I	Buck Meadows	26	31N	8E	5650
15C3A	I	Cayuse Airstrip	4	38N	11E	3700
15C7S	I	Coolwater Mountain	32	33N	BE	6200
16C16	I	Cottonwood Butte	33	32N	1W	5140
15C9A	I	Crater Meadows	2	37N	9E	6100
14C10	I	Crooked Fork	27	37N	14E	3800
16C15A	I	Elk Butte	6	40N	3E	5550
15C2AP	I	Fish Lake Airstrip	35	35N	11E	5000
15B3ASP	I	Forty-nine Meadows	6	43N	5E	4880
14C9A	I	Goat Lake	4	38N	13E	6600
16C6AP	I	Hemlock Butte	7	36N	7E	5500
15C8S	M	Hoodoo Basin	I7	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	16E	5020
14C5M	I	Lolo Pass	I6	38N	15E	5240
15B14AS	I	Lost Lake	16	43N	4E	6000
16D7	I	Lower Snowhaven	9	29N	3E	5300
15D6AP	I	Mountain Meadows	9	27N	10E	6300
14D1	M	Nez Perce Pass	25	1S	24W	6575
15D4S	I	Orogrande Mountain	24	27N	6E	7800
15C5	I	Pierce Ranger Station	2	36N	5E	3170
14C6	I	Powell Ranger Station	33	37N	14E	4230
14C4	I	Savage Pass	18	36N	15E	6170
15C4A	I	Shanghai Summit	7	37N	6E	4600
16D4	I	Upper Snowhaven	8 &9	29N	3E	5600

SALMON RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13E19MA	I	Above Gilmore	13	13N	26E	8250
13E21A	I	Aspen-Hall Pass	6	16N	28E	81I0
I5E2	I	Big Creek Summit	24	15N	5E	6600
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
13E17A	1	Copes Camp	36	18N	22E	7500
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	I9W	7100
13E20A	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9800
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23	M	Lemhi Ridge	4	10S	15W	8100
13E18MA	I	Meadow Lake	25	13N	26E	9200
14E1MAP	I	Mill Creek Summit	8	13N	17E	8800
I3D16	1	Moose Creek	14	27N	21E	6200
14E4	I	Morgan Creek	32	18N	19E	7580
13E26	1	Morse Creek Sawmill	8	15N	23E	7120
14E7	1	Redfish Lake Flat	35	10N	13E	6550
13E16A	I	Schwartz Lake	34	18N	22E	8500
14E3A	1	Twin Peaks	28	15N	17E	9170
14F4AP	I	Vienna Mine	1	5N	13E	B950
14D4	I	Williams Creek Summit	34	21N	20E	7800

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW
10J7MA	SNOW COURSE. SOIL MOISTURE STATION AND AERIAL MARKER
10J7MP	SNOW COURSE. SOIL MOISTURE STATION AND PRECIPITATION GAGE
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY
10J7p	STORAGE PRECIPITATION GAGE ONLY
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average 1/
Perreau Meadows	8000	3/31	56	16.2	15.6	--
Redfish Lake Flat	6550	3/26	43	14.4	6.3	10.9*
#Rock Flat Summit	5340	3/28	59	18.2	15.8	19.6
#Secesh Summit	6520	3/27	105	43.3	28.7	37.2*
#Squaw Flat	6240	3/26	76	25.2	--	--
#Squaw Meadow	5900	3/27	108	45.1	29.0	37.4
Twin Peaks (A)	9170	3/29	67	22.8	--	28.0
Vienna Mine	8950	3/28	106	41.1	26.6	38.7*
Williams Creek Summit	7800	3/31	42	10.8	11.6	13.5
LEMHI RIVER						
Above Gilmore	8250	3/29	36	9.2	8.4	10.6
Aspen-Hall Pass (A)	8110	3/29	50	11.8	7.6	10.6*
Copes Camp	7500	3/29	34	9.4	8.0	8.8
Hall Creek	7560	3/29	33	8.2	5.0	5.9*
Meadow Lake	9200	3/29	56	16.0	16.7	20.8
Schwartz Lake	8500	3/29	46	13.1	12.3	13.8
MIDDLE SNAKE RIVER BASIN - NORTHSIDE						
LITTLE LOST RIVER						
Fairview Guard Station	6750	3/28	8	3.2	5.0	3.2
Hilts Creek	8000	3/27	44	12.2	10.6	--
Lost Garfield	6600	3/28	13	4.2	3.2	3.0
Moonshine	7500	3/28	35	9.4	10.1	11.2
Sawmill Canyon	6900	3/28	28	8.2	7.4	8.1
Wet Creek Summit	7760	3/27	41	11.4	10.6	13.6
BIG LOST RIVER						
Bear Canyon	7920	3/25	65	20.0	12.1	19.9
Copper Basin	7650	3/25	33	9.7	6.2	10.9
Dry Fork	7340	3/26	49	17.4	11.6	16.9*
Fishpole Lake	9350	3/25	73	24.9	14.8	21.1*
Iron Bog	7650	3/26	45	14.8	12.6	14.1
Leadbelt	6800	3/26	35	10.6	6.5	9.4
#Leatherman Pass	9800	3/29	64	19.8	19.4	26.1*
Lost-Wood Divide	7900	3/25	68	24.3	14.5	24.8
Stickney Mill	7450	3/25	39	10.8	6.2	10.6
FISH CREEK						
Iron Mine Creek	6370	3/25	40	12.6	9.4	10.5
Telfer Ranch	6000	3/25	24	8.7	6.1	6.8

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [b]
LITTLE WOOD RIVER						
#Bear Canyon	7920	3/25	65	20.0	12.1	19.9
Garfield Ranger Station	6560	3/29	40	13.9	7.4	10.2
Muldoon	6300	3/29	27	9.5	6.2	7.1
Swede Peak	7640	3/29	62	20.2	12.4	18.1
BIG WOOD RIVER						
Camas Creeks Divide	5720	3/26	34	12.5	4.8	8.8*
Chimney Creek	6400	3/26	45	16.8	9.1	--
#Couch Summit	6850	3/26	65	21.7	13.0	18.7
Dollarhide Summit	8400	3/28	74	25.9	18.0	25.1
Galena	7300	3/31	56	19.5	13.1	19.5
Galena Summit	8780	3/31	74	23.7	16.1	25.2
Graham Ranch	6280	3/31	48	15.6	11.1	14.4
Hyndman	7440	3/25	51	16.7	10.6	--
#Lost-Wood Divide	7900	3/25	68	24.3	14.5	24.8
Mascot Mine	7760	3/25	50	15.6	11.9	15.5
Mount Baldy	9000	3/28	71	20.2	14.8	21.4
Soldier Ranger Station	6100	3/26	32	11.6	7.3	10.3
#Vienna Mine	8950	3/28	106	41.1	26.6	38.7*
CANYON CREEK						
Bennett Mountain	6650	3/26	54	17.2	14.8	17.5
#Camas Creeks Divide	5720	3/26	34	12.5	4.8	8.8*
Little Camas Flat	4950	3/26	9	2.7	0.0	4.0
BOISE RIVER						
Atlanta Summit	7500	3/28	104	37.1	25.2	36.2
Atlanta Town Site	5280	3/28	32	12.1	--	--
Bad Bear	5500	4/1	38	15.1	9.9	13.9
#Bennett Mountain	6650	3/26	54	17.2	14.8	17.5
#Bogus Basin	6340	4/1	85	30.5	20.2	24.5
Bogus Basin Road	5520	4/1	10	3.5	0.0	2.2
#Camas Creeks Divide	5720	3/26	34	12.5	4.8	8.8*
#Chimney Creek	6400	3/26	45	16.8	9.1	--
Couch Summit	6850	3/26	65	21.7	13.0	18.7
Deadman Gulch	5600	3/30	50	16.2	14.2	16.8*
#Dollarhide Summit	8400	3/28	74	25.9	18.0	25.1
Graham Guard Station	5690	3/28	47	16.6	11.0	--
Jackson Peak	7070	3/28	98	35.0	22.8	33.1
#Little Camas Flat	4950	3/26	9	2.7	0.0	4.0
Moores Creek Summit	6100	4/1	96	35.6	23.8	33.6
Prairie	4800	3/31	0	0.0	0.0	3.4
Road Creek	5550	3/28	30	10.1	0.0	9.2*

*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- Aerial Snow Depth Gage
- Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- Radio Telemetry

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LITTLE LOST RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13E5M	I	Fairview Guard Station	27	12N	26E	6750
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6	I	Moonshine	31	13N	26E	7500
13E4	I	Sawmill Canyon	17	12N	26E	6900
13E7MP	I	Wet Creek Summit	15	8N	25E	7760

BIG LOST RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13F3	I	Bear Canyon	22	5N	21E	7920
13F2A	I	Copper Basin	25	6N	21E	7650
13F3A	I	Fishpole Lake	28	4N	22E	9350
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6800
14F3A	I	Lost Wood Divide	25	6N	18E	7900
14F2A	I	Stickney Mill	9	6N	19E	7450
13F1	I	White Knob	25	7N	23E	7700

BIG WOOD RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15F9	I	Camas Creeks Divide	11	2S	9E	5720
14F8	I	Dollarhide Summit	9	3N	15E	8400
14F1M	I	Galena	2	6N	15E	7440
14F12MPS	I	Galena Summit	5	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6280
14F7	I	Mascot Mine	8	4N	20E	7760
14F9	I	Mount Baldy	26	4N	17E	9000
14F11	I	Soldier Ranger Station	19	2N	14E	6100

LITTLE WOOD RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13F4	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	25	3N	21E	6300
13F9R	I	Swede Peak	4	3N	21E	7640

FISH CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
13F10	I	Iron Mine Creek	32	3N	23E	6370
13F6	I	Telfer Ranch	12	2N	22E	6000

BOISE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15F4APS	I	Atlanta Summit	23	5N	10E	7500
15F2	I	Bad Bear	35	7N	6E	5500
16F4	I	Bogus Basin Road	32	5N	3E	5520
14F10	I	Couch Summit	9	2N	14E	6850
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14PSR	I	Graham Guard Station	9	7N	10E	5690
15E9AP	I	Jackson Peak	7	8N	9E	7070
15F1MPSR	I	Moores Creek Summit	19	7N	7E	6100
15F6P	I	Prairie	13	2N	7E	4800
15F3A	I	Road Creek	5	5N	8E	5550
15FAPSR	I	Trinity Mountain	6	3N	9E	7780

CANYON CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
15F7	I	Bennett Mountain	7	2S	9E	6650
15F12	I	Little Camas Flat	21	1S	9E	4950

PAYETTE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16F2PS	I	Bogus Basin	16	5N	3E	6340
15E8PSR	I	Cozy Cove	17	11N	7E	5400
15E3	I	Crawford Ranger Station	21	14N	4E	4800
15E10	I	Deadwood Airstrip	8	11N	7E	5440
15E4AS	I	Deadwood Summit	23	14N	7E	6800
16E4	I	High Valley Summit	9	10N	2E	5170
15E1	I	Lake Fork	3	18N	4E	6000
16E1	I	Rock Flat Summit	1	18N	2E	5340
15D1	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5200

WEISER RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16D1P	I	Boulder Creek	16	20N	1W	5500
16E2	I	Placer Creek	15 & 16	17N	3W	6000

MANN CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR ANO	RGE. / LONG.	ELEV.
16E9	I	Mann Creek	20	15N	5W	6080
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
17E2	I	Thorson Cabin	12	14N	6W	5320

LEGEND

Numbering System (exomple)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE ANO SOIL MOISTURE STATION.
10J7A	SNOW COURSE ANO AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE ANO PRESSURE PILLOW
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION ANO PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RAOIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [b]
#Soldier Ranger Station	6100	3/26	32	11.6	7.3	10.3
Trinity Mountain	7780	3/28	121	45.2	30.2	43.2
#Vienna Mine	8950	3/28	106	41.1	26.6	38.7*
PAYETTE RIVER						
Banner Summit	7040	3/28	87	32.2	21.3	--
#Bear Basin	5350	3/28	64	21.5	--	--
#Big Creek Summit	6600	3/28	116	41.8	27.5	37.5
Bogus Basin	6340	4/1	85	30.5	20.2	24.5
#Brundage Mountain	7560	3/28	130	52.2	35.5	48.6*
Cozy Cove	5400	3/28	46	17.8	11.0	16.6
Crawford Ranger Station	4800	3/28	18	6.5	3.4	6.1
#Deadman Gulch	5600	3/30	50	16.2	14.2	16.8*
Deadwood Airstrip	5440	3/28	50	17.9	11.4	15.6
Deadwood Summit	7000	3/28	130	51.1	31.6	47.5
#Jackson Peak	7070	3/28	98	35.0	22.8	33.1
Lake Fork	6000	3/27	47	15.1	15.3	16.9
Rock Flat Summit	5340	3/28	59	18.2	15.8	19.6
Secesh Summit	6520	3/27	105	43.3	28.7	37.2*
#Squaw Flat	6240	3/26	76	25.2	--	--
Squaw Meadow	5900	3/27	108	45.1	29.0	37.4
Tripod Summit	5200	3/26	55	19.4	14.7	19.7
WEISER RIVER						
Boulder Creek	5500	3/31	54	18.0	19.6	25.1
Placer Creek	6000	3/29	64	24.2	17.7	18.8
Squaw Flat	6240	3/26	76	25.2	--	--
MANN CREEK						
Bear Saddle	6180	3/27	74	27.0	--	--
Mann Creek	6080	3/27	71	25.6	23.2	27.7*
Robinson Creek Ridge	6220	3/27	59	20.0	19.0	21.3*
Sturgill Ridge	6680	3/27	78	31.2	25.7	32.6*
Thorson Cabin	5320	3/27	47	18.0	13.4	14.3*

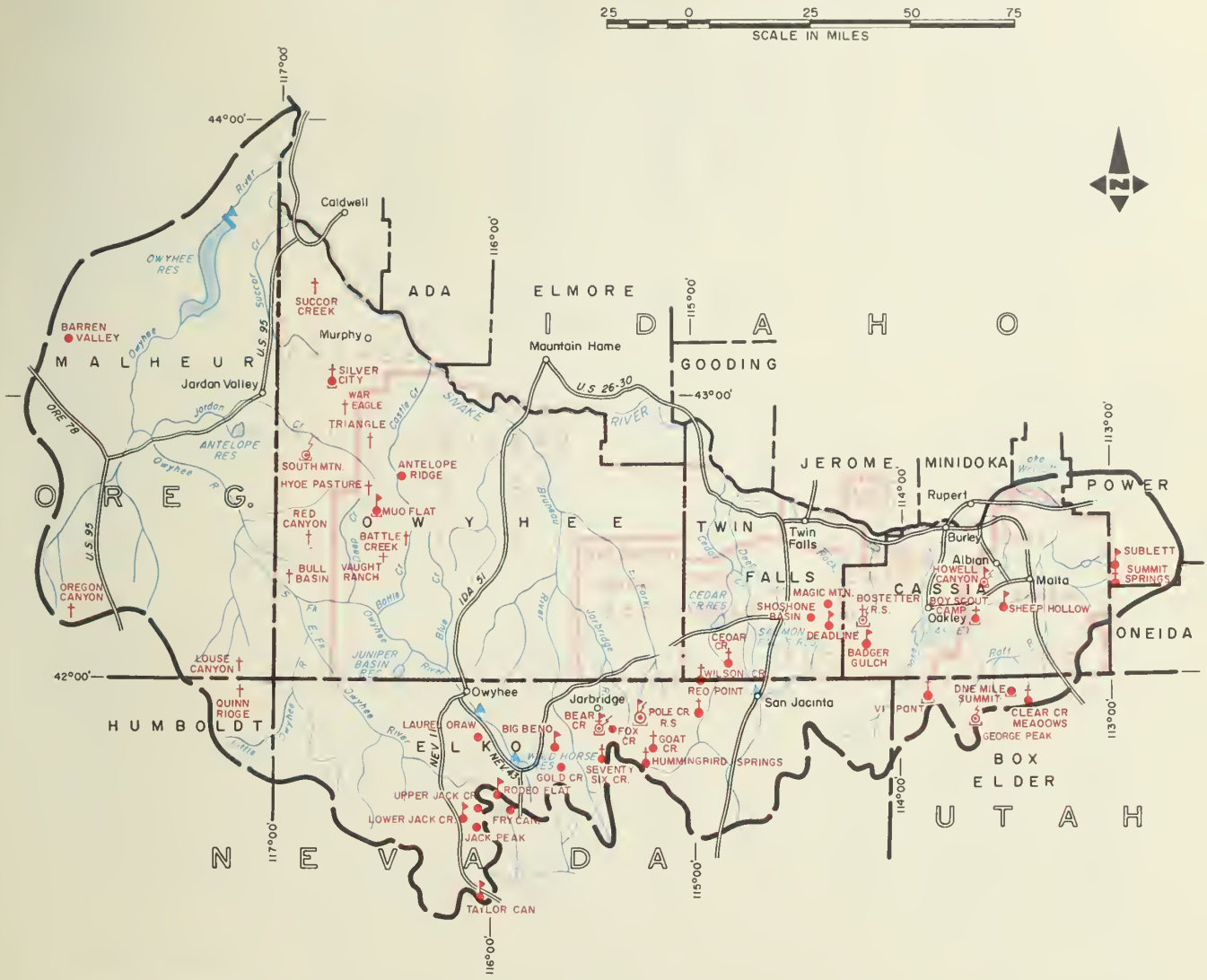
*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average [b]
MIDDLE SNAKE RIVER BASIN - SOUTHSIDE							
RAFT RIVER							
Boy Scout Camp		7750	3/29	53	17.8	16.0	15.8
Clear Creek Meadows	Utah	9050	3/29	65	19.8	20.4	23.6
Howell Canyon		7980	3/29	72	26.9	19.3	26.1
Indian Grove		7560	3/29	52	15.6	13.3	--
Logger Springs		8100	3/29	67	21.6	17.0	--
One Mile Summit	Utah	7330	3/29	26	7.5	5.9	7.6
Sublett		6000	3/29	34	12.2	10.5	11.1
GOOSE CREEK							
Badger Gulch		6660	3/29	48	15.7	14.6	13.1
Bostetter Ranger Station		7500	3/29	64	20.6	19.6	20.2
#Indian Grove		7580	3/29	52	15.2	13.3	--
#Logger Springs		8120	3/29	67	21.6	17.0	--
Vi Pont	Utah	7670	3/29	52	17.0	16.5	15.1*
SALMON FALLS CREEK							
#Bear Creek	Nev.	7800	4/1	78	23.9	19.2	21.3
Cedar Creek		7000	4/1	38	11.5	9.9	10.0
Deadline		6900	4/1	90	34.2	21.8	22.3
#Fox Creek	Nev.	6800	4/1	41	12.8	9.2	9.9*
Goat Creek	Nev.	8800	4/1	72	22.2	14.1	18.6
#Hummingbird Springs	Nev.	8940	4/1	87	28.1	18.0	23.7
Magic Mountain		6700	4/1	65	21.3	19.4	19.2
#Pole Creek Rgr. Sta.		8330	4/1	77	24.2	14.3	22.5
Shoshone Basin		5740	4/1	22	7.7	10.8	5.1*
Wilson Creek		7500	4/1	52	16.0	10.0	11.9
BRUNEAU RIVER							
Bear Creek	Nev.	7800	4/1	78	23.9	19.2	21.3
Fox Creek	Nev.	6800	4/1	41	12.8	9.2	9.9*
Hummingbird Springs	Nev.	8940	4/1	87	28.1	18.0	23.7
Pole Creek Rgr. Sta.	Nev.	8330	4/1	77	24.2	14.3	22.5
#Seventy-six Creek	Nev.	7100	4/1	48	15.4	12.3	11.4
OWYHEE RIVER							
Antelope Ridge		6150	3/26	10	4.4	3.4	6.2
Battle Creek (A)		5700	3/25	0	0.0	0.0	1.7
#Bear Creek	Nev.	7800	4/1	78	23.9	19.2	21.3
Bull Basin (A)		5600	3/25	T	0.1	0.0	0.4
#Fox Creek	Nev.	6800	4/1	41	12.8	9.2	9.9*

*(b) 1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

MIDDLE SNAKE RIVER BASIN SOUTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and Snow Pressure Pillow
- Snow Pressure Pillow
- Aerial Snow Depth Gage
- Soil Moisture Station
- Temperature Gage
- Precipitation Gage
- Radio Telemetry

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN SOUTHSIDE

RAFT RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
13G2AP	I	Boy Scout Camp	8	14S	24E	7760
13H2A	U	Clear Creek Meadows	26	14N	14W	9050
13H4SP	U	George Peak	4	13N	14W	9000
13G1MP	I	Howell Canyon	2	13S	24E	8000
13H1P	U	One Mile Summit	19	14N	14W	7330
13G5M	I	Sheep Hollow	4	14S	24E	6200
12G8M	I	Sublett	8	12S	30E	6000
12G9A	I	Summit Springs	15	13S	30E	6400

GOOSE - TRAPPER CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
14G3M	I	Badger Gulch	24	15S	19E	6660
14G1AP	I	Bostetter Ranger Station	35	14S	19E	7500
13H3AP	U	Vi Pont	17	14N	17W	7670

SALMON FALLS CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
14G5A	I	Cedar Creek	25	15S	13E	7000
14G4M	I	Deadline	25	14S	18E	6900
15H13A	N	Goat Creek	31	46N	60E	8800
14G2	I	Magic Mountain	14	14S	18E	6700
15H18A	N	Red Point	15	47N	61E	7940
14G6	I	Shoshone Basin	24	14S	17E	5740
15G2A	I	Wilson Creek	24	16S	12E	7500

BRUNEAU RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
15H1MAP	N	Bear Creek	31	46N	58E	7800
15H2	N	Fox Creek	33	46N	58E	6800
15H15A	N	Hummingbird Springs	6	45N	60E	8950
15H14MP	N	Pole Creek Ranger Station	13	46N	59E	8330

OWYHEE RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
16G6	I	Antelope Ridge	20	8S	1E	5900
18F5	O	Barren Valley	26	17S	38E	4200
16G9a	I	Battle Creek	10	11S	1E	5700
15H4M	N	Big Bend	30	45N	56E	6700
16G10a	I	Bull Basin	19	12S	5W	5600
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
16G5a	I	Hyde Pasture	SE¼ 31	8S	2W	5800
16H4	N	Jacks Peak	28	42N	53E	8420
16H5	N	Laurel Draw	20	45N	53E	6700
17G4a	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	13	42N	53E	6800
16G7MP	I	Mud Flat	34	9S	2W	5500
17G5a	O	Oregon Canyon	9	40S	40E	6950
17H6a	N	Quinn Ridge	9	47N	41E	6300
16G11ap	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3AP	I	Silver City	6	5S	3W	6400
16G1PSR	I	South Mountain	35	7S	5W	6340
16F6a	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
16G4a	I	Triangle	N. 35	7S	3W	5150
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12a	I	Vaught Ranch	10	11S	1W	5950
16G13a	I	War Eagle	20	5S	3W	7700

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY
10J7S	SNOW COURSE AND PRESSURE PILLOW
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY
10J7p	STORAGE PRECIPITATION GAGE ONLY
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME		Elevation				Last Year	Average ⁴
Hyde Pasture (A)		5800	3/25	6	2.3	0.0	3.2
Mud Flat		5720	3/26	16	8.0	6.0	4.9
Red Canyon (A)		6650	3/25	29	11.0	9.5	5.0
#Seventy-six Creek	Nev.	7100	4/1	48	15.4	12.3	11.4
Silver City		6400	3/26	48	16.1	14.4	15.4
South Mountain		6340	3/31	54	20.4	15.8	13.0
Succor Creek (A)		6100	3/25	27	9.2	--	5.0
Vaught Ranch (A)		5950	3/25	0	0.0	0.0	1.7*
War Eagle (A)		7700	3/25	81	27.5	28.5	25.1*

UPPER SNAKE RIVER BASIN

CAMAS-BEAVER CREEKS

Blue Ledge Mine		6700	3/28	43	14.4	15.2	17.8
Camp Creek		6800	4/1	39	10.2	9.4	12.0
Kilgore		6200	3/28	33	11.2	12.4	11.5

HENRYS FORK RIVER

Big Springs		6400	3/27	55	18.3	21.0	22.0
Black Canyon		7850	3/27	99	34.8	35.6	35.4*
Black Moose		8130	3/27	103	37.0	39.6	40.3*
Grassy Lake	Wyo.	7230	2/27	90	31.3	38.9	36.6
Island Park		6290	3/27	49	16.0	19.8	17.2
Latham Springs		7650	3/27	86	31.2	34.6	34.8
Lucky Dog		6900	3/28	65	22.2	26.2	26.0
Sawtell Mountain		8720	3/27	111	35.5	35.6	35.1*
Targhee Pass		7000	3/28	44	11.3	16.6	17.1*
Valley View		6740	3/27	50	15.2	19.5	18.4
White Elephant		7700	3/28	83	26.4	24.4	25.6*

TETON RIVER

Darby Canyon	Wyo.	8250	4/1	71	23.2	23.6	24.0*
Freds Mountain	Wyo.	8150	3/28	70	23.8	23.8	20.7*
Indian Meadows	Wyo.	8240	3/31	100	35.8	36.8	37.4*
Jackpine Creek	Wyo.	7350	3/31	62	20.1	20.6	23.0*
McRenolds Reservoir		6800	3/31	57	16.8	22.6	20.7*
Phillips Bench	Wyo.	8200	3/24	75	26.0	33.0	30.6*
Pine Creek Pass		6750	3/28	47	14.6	18.8	18.3
State Line		6650	3/28	45	14.2	18.4	15.3
Teton Pass W.S.	Wyo.	8400	3/24	65	20.7	30.4	27.7*

(b)1963-77, 15 year period. #Not located directly on this drainage. ⁴ Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average ✓
WILLOW CREEK						
Aspen Grove	6500	3/28	46	15.1	13.5	12.1*
Birch Creek	6800	3/28	34	11.6	13.0	11.4*
Blue Ridge	6800	3/29	58	21.7	17.3	--
Bone	6200	3/29	21	7.8	8.8	7.2*
Brockman Station	6430	3/28	34	11.7	13.6	--
Hell Creek	7100	3/28	46	15.5	16.4	--
Mud Creek	7150	3/29	69	24.3	16.6	--
Sheep Mountain	6570	3/29	40	14.4	14.0	13.9*
Tex Creek	6650	3/28	40	10.8	12.0	9.7*
BLACKFOOT						
Austin Bros. Ranch	6400	3/28	25	9.0	9.4	8.9
Johnson Creek	6730	3/28	54	16.3	--	--
Slug Creek Divide	7230	3/26	58	19.5	18.0	18.0
Somsen Ranch	7000	3/28	52	15.4	17.8	15.1
Sulphur Peak	7070	3/28	58	18.5	--	--
Wood Canyon Divide	7450	3/28	64	20.3	--	--
PORTNEUF RIVER						
Beaverdam Creek	6120	3/29	32	12.2	--	--
Dempsey Creek	6100	3/29	44	13.7	15.4	13.0
East Creek	7000	3/29	39	12.0	--	--
Johnson Creek	6730	3/28	54	16.3	--	--
Lower Pebble	5800	3/29	45	15.0	17.5	13.3*
Mink Creek	6300	3/30	68	20.9	19.8	18.3
Pebble Creek	6550	3/29	56	20.3	17.4	16.7
Sedgwick Peak	7850	3/29	64	21.3	--	--
#Sulphur Peak	7070	3/28	58	18.5	--	--
#Wood Canyon Divide	7450	3/28	64	20.3	--	--

(b)1963-77, 15 year period. #Not located directly on this drainage. ✓ Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

UPPER SNAKE RIVER BASIN

INDEX to SNOW COURSES

UPPER SNAKE RIVER BASIN

SNAKE RIVER - WYOMING

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
10G4	Wy	Afton Ranger Station	30	32N	118W	6200
10F1	Wy	Arizona	3	46N	115W	6850
10E8	Wy	Aster Creek	44° 17'		110° 38'	7700
10F2	Wy	Base Camp	20	46N	113W	6900
10F7	Wy	Blackrock	4	44N	111W	8600
10G2A	Wy	Blind Bull	6	34N	115W	8750
10F14	Wy	Bryan Flat	9	38N	115W	6250
10G7	Wy	CCC Camp	9	29N	118W	7500
10G5A	Wy	Cottonwood Lake	25	31N	118W	7500
10E10	Wy	Coulter Creek	44° 09'		110° 33'	7600
10F17MP	Wy	East Rim Divide #2	32	37N	111W	7950
10F6	Wy	Four Mile Meadows	35	45N	112W	7770
10E13	Wy	Glade Creek	12	48N	116W	7200
10F18	Wy	Greys Boundary	33	37N	118W	5800
10F19	Wy	Gros Ventre Summit	36	40N	111W	8750
10G3	Wy	Grover Park Divide	27	33N	118W	7500
10E14	Wy	Huckleberry Divide	32	48N	115W	7300
10E9PS	Wy	Lewis Lake Divide	44° 13'		110° 40'	7900
10F4MP	Wy	Moran	8 & 17	45N	114W	6800
10F3	Wy	Moran Bay	14	45N	116W	6800
10G6	Wy	Poison Meadows	29	30N	116W	8500
10G8P	Wy	Salt River Summit	32	29N	118W	7900
10E12MP	Wy	Snake River Station	9	48N	115W	6780
10F20M	Wy	Snow King Mountain #3	4	40N	117W	7600
10E7	Wy	Thumb Divide	44° 22'		110° 35'	7900
10F9MP	Wy	Togwotee Pass	29	44N	110W	9600
10F5	Wy	Turpin Meadows	14	45N	112W	6930
10G1A	Wy	Young's Ranch	26	34N	116W	6530

HENRYS FORK RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11E9	I	Big Springs	4	13N	44E	6400
11E18	I	Black Canyon	11	13N	45E	7850
11E19	I	Black Moose	33	14N	45E	8125
10E15	Wy	Grassy Lake	6	48N	117W	7230
11E10M	I	Island Park	28	13N	43E	6290
11E16	I	Latham Springs	9	13N	45E	7650
11E14	I	Lucky Dog	2	13N	45E	6900
11E32	I	Sawtell Mountain	7	14N	43E	8720
11E34	I	Targhee Pass	32	16N	44E	7000
11E8M	I	Valley View	7	15N	44E	6740
11E36	I	White Elephant	17	14N	43E	7700

TETON RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
10F21	Wy	Darby Canyon	28	43N	118W	8250
10F22	Wy	Freds Mountain	12	44N	118W	8150
11F13	I	Garns Mountain	20	4N	44E	8300
10F25	Wy	Indian Meadows	31	46N	117W	8240
10F26	Wy	Jackpine Creek	15	46N	118W	7350
11F12	I	McRenolds Reservoir	5	7N	46E	6800
10F27	Wy	Miles Creek	13	44N	118W	7300
11F2M	I	Pine Creek Pass	24	3N	44E	6750
11F1M	I	State Line	32	3N	46E	6650
10F13	Wy	Teton Pass W. S.	24	41N	118W	8400

CAMAS - BEAVER CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11E11	I	Blue Ledge Mine	27	13N	38E	6700
12E3	I	Camp Creek	21	13N	36E	6800
11E12	I	Kilgore	6	12N	39E	6200

MEDICINE LODGE CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
12E4	I	Irving Creek	20	13N	33E	7035
12E5	I	Webber Creek	23	12N	32E	6700

WILLOW CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11F10	I	Aspen Grove	36	2N	41E	6500
11F3	I	Birch Creek	36	2N	41E	6800
11F17I	I	Blue Ridge	35	2S	39E	6800
11F8	I	Bone	29	1S	40E	6250
11F16	I	Brockman Station	19	2S	43E	6430
11F15	I	Hell Creek	27	1S	42E	7100
11F14	I	Mud Creek	3	2S	39E	7150
11F11R	I	Sheep Mountain	30	2S	41E	6570
11F5R	I	Tex Creek	36	1N	42E	6650

SAND CREEK

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11F6	I	Henry Creek	7	1S	39E	5650

BLACKFOOT RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
11G3	I	Austin Brothers Ranch	28	7S	43E	6400
11G5PS	I	Slug Creek Divide	15	10S	44E	7225
11G1MS	I	Somsen Ranch	25	5S	43E	7000
11G29	I	Ten Mile Pass	8	8S	41E	6250

PORTNEUF RIVER

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.
12G5	I	Dempsey Creek	18	10S	38E	6100
12G6M	I	Lower Pebble	7	8S	38E	5800
12G1	I	Mink Creek	33	7S	34E	6300
12G2M	I	Pebble Creek	34	7S	37E	6550

LEGEND

Numbering System (example)

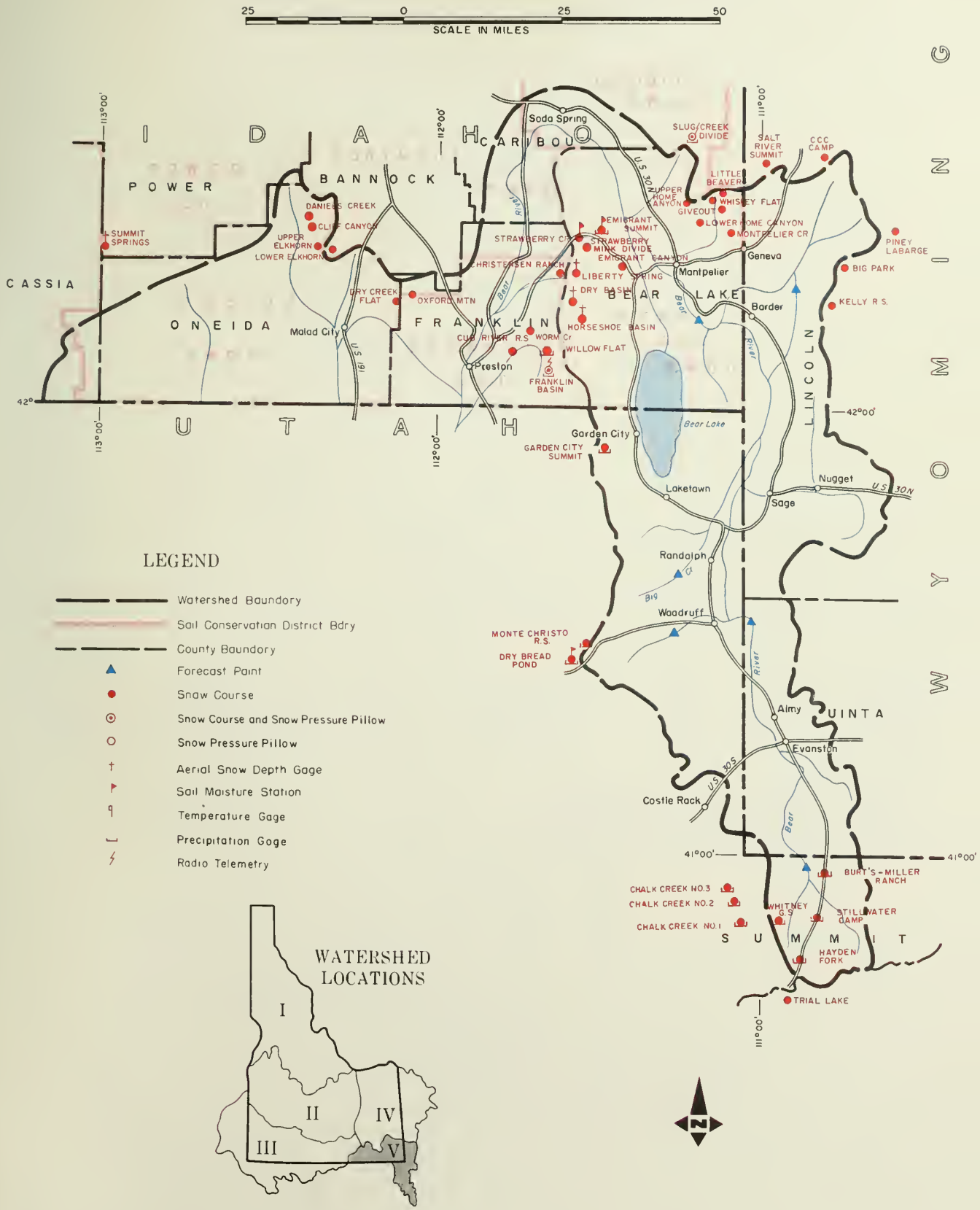
10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION.
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY.
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RADIOACTIVE GAGE

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
GREAT BASIN						
BEAR RIVER						
Emigrant Summit	7380	4/1	83	27.6	23.7	26.0
Emigration Canyon	6500	4/1	42	14.3	11.3	11.1
MONTPELIER CREEK						
Giveout	6840	3/26	45	14.0	16.2	13.0
Little Beaver	6970	3/26	52	16.1	16.8	16.3
Lower Home Canyon	7640	3/27	50	15.3	14.9	14.9*
Montpelier Creek	6570	3/26	31	8.8	11.6	8.4
Upper Home Canyon	8560	3/27	74	25.0	22.6	25.1*
Whiskey Flat	6960	3/26	33	11.1	11.2	9.4
MINK CREEK						
Christensen Ranch	5400	4/3	33	12.7	9.6	7.6
Dry Basin	7900	4/3	99	38.4	30.0	30.2
#Emigrant Summit	7380	4/1	83	27.5	23.7	26.0
Horseshoe Basin	8000	4/3	96	39.8	29.8	25.6
Liberty Spring	8600	4/4	117	40.7	40.4	39.8
Strawberry Creek	5800	4/1	39	12.3	13.0	10.2
Strawberry Mink Divide	6800	4/3	73	29.7	23.8	21.9
CUB RIVER						
Cub River Rgr. Sta.	5400	4/3	26	10.4	9.8	6.9
#Franklin Basin	8000	4/3	82	32.1	27.8	28.2
Willow Flat	6100	4/3	48	20.4	19.4	14.8
Worm Creek	6660	4/3	66	25.2	21.1	--
MALAD RIVER						
Cliff Canyon	7200	4/4	34	10.2	11.0	--
Daniels Creek	6400	4/4	26	9.6	6.9	--
Dry Creek Flat	6480	4/4	29	10.4	7.6	5.3
Lower Elkhorn	7000	4/4	52	18.9	12.2	14.0*
Oxford Mountain	6800	4/4	38	12.3	12.5	9.5
Upper Elkhorn	7100	4/4	71	22.0	19.2	19.5*

*(b) 1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

GREAT BASIN


25 0 25 50
SCALE IN MILES
I D A H O
U T A H
W Y O M I N G
POWER
BANNOCK
CARIBOU
CASSIA
ONEIDA
FRANKLIN
BEAR LAKE
LINCOLN
UINTA
SUMMIT
Soda Spring
Montpelier
Geneva
Bancroft
Malad City
Preston
Garden City
Laketown
Sage
Nugget
Randolph
Woodruff
Almy
Evanston
Castle Rock
Bear Lake
SUMMIT SPRINGS
DANIELS CREEK
CLIFF CANYON
UPPER ELKHORN
LOWER ELKHORN
DRY CREEK FLAT
OXFORD MTN
CUB RIVER R.S.
WORM Cr
WILLOW FLAT
FRANKLIN BASIN
HORSESHOE BASIN
DRY BASIN
LIBERTY SPRING
CHRISTENSEN RANCH
STRAWBERRY CR
STRAWBERRY
MINK DIVIDE
EMIGRANT CANYON
EMIGRANT SUMMIT
UPPER HOME CANYON
SLUG/CREEK DIVIDE
GIVEOUT
LITTLE BEAVER
WHISKEY FLAT
LOWER HOME CANYON
MONTPELIER CR
SALT RIVER SUMMIT
CCC CAMP
PINEY LABARGE
BIG PARK
KELLY R.S.
GARDEN CITY SUMMIT
MONTE CHRISTO R.S.
DRY BREAD POND
CHALK CREEK NO.3
CHALK CREEK NO.2
CHALK CREEK NO.1
WHITNEY G.S.
STILLWATER CAMP
HAYDEN FORK
BURT'S-MILLER RANCH
TRIAL LAKE
U.S. 30N
U.S. 30S
U.S. 191
Bear River
Big Ck
113°00'
112°00'
111°00'
42°
42°00'
41°00'
LEGEND
Watershed Boundary
Soil Conservation District Bdry
County Boundary
Forecast Point
Snow Course
Snow Course and Snow Pressure Pillow
Snow Pressure Pillow
Aerial Snow Depth Gage
Soil Moisture Station
Temperature Gage
Precipitation Gage
Radio Telemetry
WATERSHED LOCATIONS
I
II
III
IV
V
N

INDEX to SNOW COURSES

NO.	STATE	NAME	SEC. / LAT.	TWP. OR AND	RGE. / LONG.	ELEV.

GREAT BASIN

BEAR RIVER

10G11	Wy	Big Park	7	27N	117W	8700
11H13MP	U	Dry Bread Pond	19	8N	4E	8230
11G7	I	Emigration Canyon (mouth)	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burt's-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	1S	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300

MONTPELIER CREEK

11G16	I	Giveout	2	12S	45E	6840
11G20	I	Little Beaver	26	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7500
11G18	I	Montpelier Creek	22	12S	45E	6570
11G26	I	Upper Home Canyon	31	11S	45E	8500
11G21	I	Whiskey Flat	26	11S	45E	6985

MINK CREEK

11G11	I	Christensen Ranch	27	13S	41E	5600
11G14A	I	Dry Basin	30	13S	42E	7900
11G6MP	I	Emigrant Summit	21	12S	42E	7350
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13A	I	Liberty Spring	7	13S	42E	8600
11G9M	I	Strawberry Creek	9	13S	41E	5800
11G10	I	Strawberry Mink Divide	14	13S	41E	6800

CUB RIVER

11G12	I	Cub River Ranger Station	5	15S	41E	5400
11G8S	I	Franklin Basin	1	16S	41E	8000
11G4P	I	Willow Flat	2	15S	41E	6100
11G28	I	Worm Creek	28	14S	41E	6660

MALAD RIVER

12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6400
12G4	I	Dry Creek Flat	28	13S	37E	6480
12G11	I	Lower Elkhorn	30	12S	36E	7000
12G3	I	Oxford Mountain	27	13S	37E	6800
12G10	I	Upper Elkhorn	25	12S	35E	7100

LEGEND

Numbering System (example)

10J7	SNOW COURSE ONLY.
10J7P	SNOW COURSE AND PRECIPITATION GAGE.
10J7M	SNOW COURSE AND SOIL MOISTURE STATION
10J7A	SNOW COURSE AND AERIAL MARKER.
10J7s	PRESSURE PILLOW ONLY.
10J7S	SNOW COURSE AND PRESSURE PILLOW.
10J7MA	SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER.
10J7MP	SNOW COURSE, SOIL MOISTURE STATION AND PRECIPITATION GAGE.
10J7m	SOIL MOISTURE STATION ONLY
10J7a	AERIAL MARKER ONLY.
10J7p	STORAGE PRECIPITATION GAGE ONLY.
10J7R	RADIOACTIVE GAGE

IMPORTANT NOTICE

WATER SUPPLY OUTLOOK FOR IDAHO

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Water Supply Outlook For Idaho

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IDAHO DEPARTMENT OF WATER RESOURCES

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TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Sail Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

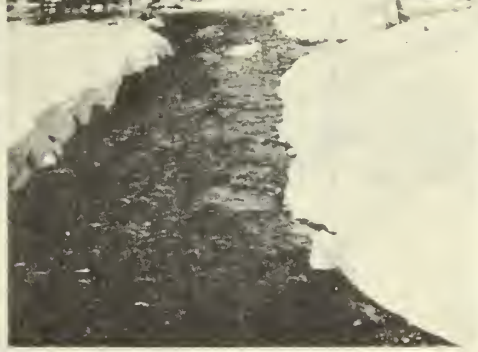
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR MAY 1, 1980

The water supply outlook for Idaho during the 1980 season is adequate for the Snake River Basin and its tributaries, the Bear River and its tributaties and the Priest River and Kootenai River in the northern part of the state. Some shortage can be expected in the Clearwater watershed with considerable shortage probable on the Spokane and Palouse drainages. Forecasts of seasonal runoff range from a low of 58 percent of average for the Spokane River at Post Falls to 102 percent of normal for the Cub River near Preston.

The National Weather Service reported below normal precipitation and above average temperatures during April, statewide.

The April 1 snow covered area melted off unusually fast during the month with only one-third of the area showing snow cover near May 1. Lower elevation snow is gone, middle elevation is nearly depleted and the high elevation snowpack is below to well below normal. Runoff during April, though generally above normal, was not as great as expected from the amount of snow melt experienced.

Reservoir storage is good to excellent with a combination of sixteen irrigation reservoirs in the Snake Basin showing current storage of 83 percent of capacity and 115 percent of average.

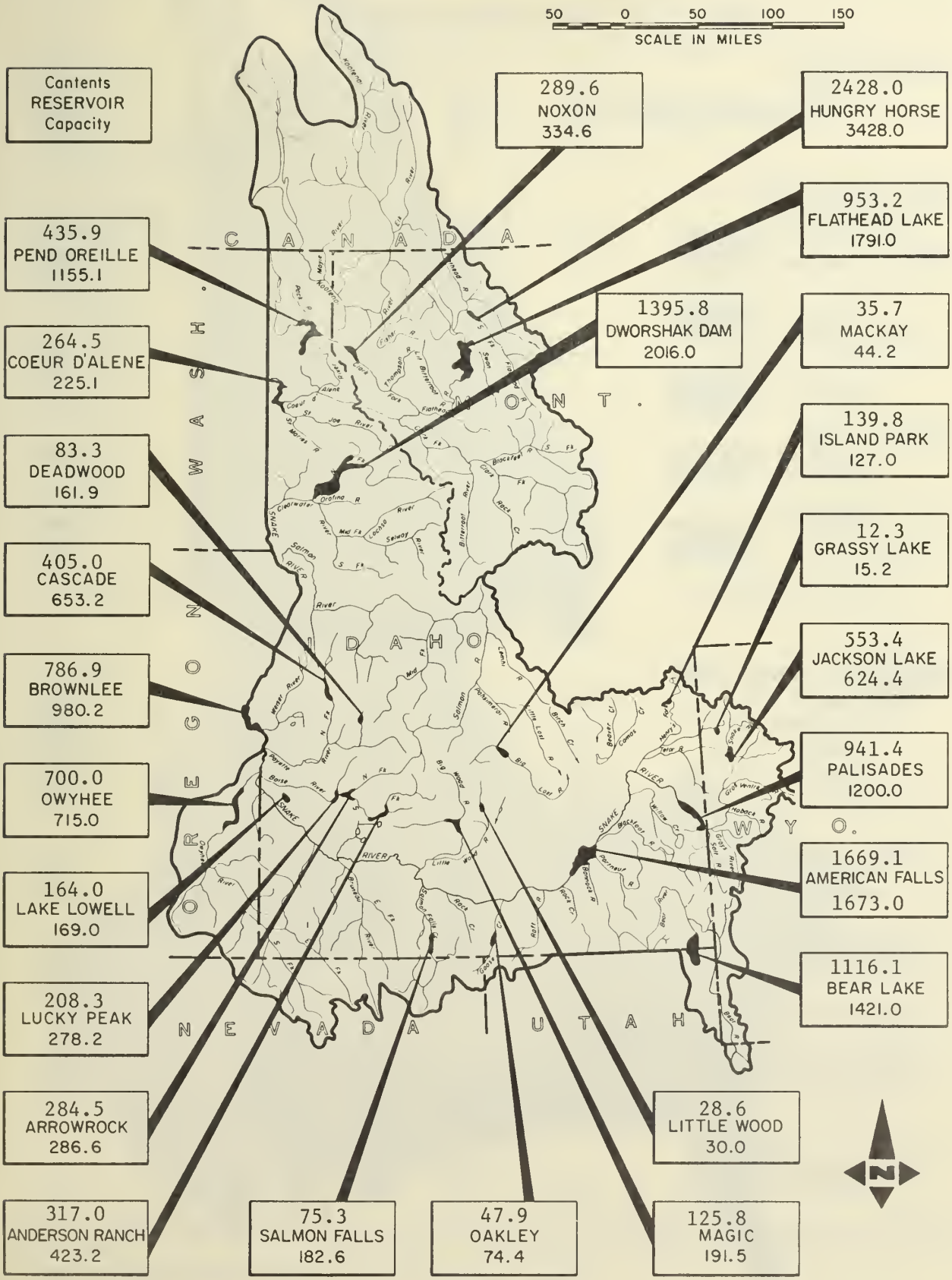
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2428.0	2285.0	1896.0
Flathead	1791.0	953.2	738.5	915.3
Pend Oreille	1155.1	435.9	467.1	483.0
Noxon	334.6	289.6	278.1	141.7
Spokane				
Coeur d'Alene	225.1	264.5	260.5	238.4
SNAKE BASIN				
Snake				
Jackson Lake	624.4	553.4	487.9	572.3
Palisades	1200.0	941.4	710.1	666.3
Americian Falls	1673.0	1669.1	1639.9	1488.4
Island Park	127.0	139.8	99.5	126.3
Grassy Lake	15.2	12.3	13.0	11.1
Brownlee	980.2	786.9	725.3	406.4
Goose-Trapper Creeks				
Oakley	74.4	47.9	46.6	37.8
Salmon Falls Creek				
Salmon Falls	182.6	75.3	64.7	81.0
Big Lost				
Mackay	44.2	35.7	43.8	34.0
Big Wood				
Magic	191.5	125.8	165.8	172.7
Little Wood				
Little Wood	30.0	28.6	30.0	24.5
Fish Creek				
Carey Valley	14.4	12.9	9.5	--
Boise				
Anderson Ranch	423.2	317.0	344.1	289.3
Arrowrock	286.6	284.5	263.6	213.2
Lucky Peak	278.2	208.3	212.9	134.1
Lake Lowell (Deer Flat)	169.0	164.0	162.8	151.2
Owyhee				
Owyhee	715.0	700.0	701.3	591.2
Payette				
Cascade	653.2	405.0	389.9	330.9
Deadwood	161.9	83.3	97.1	98.2
Weiser				
Mann Creek	11.1	11.4	11.3	--
Clearwater				
Dworshak	2016.0	1395.8	961.1	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1116.1	1091.7	1095.0

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

MAY 1, 1980

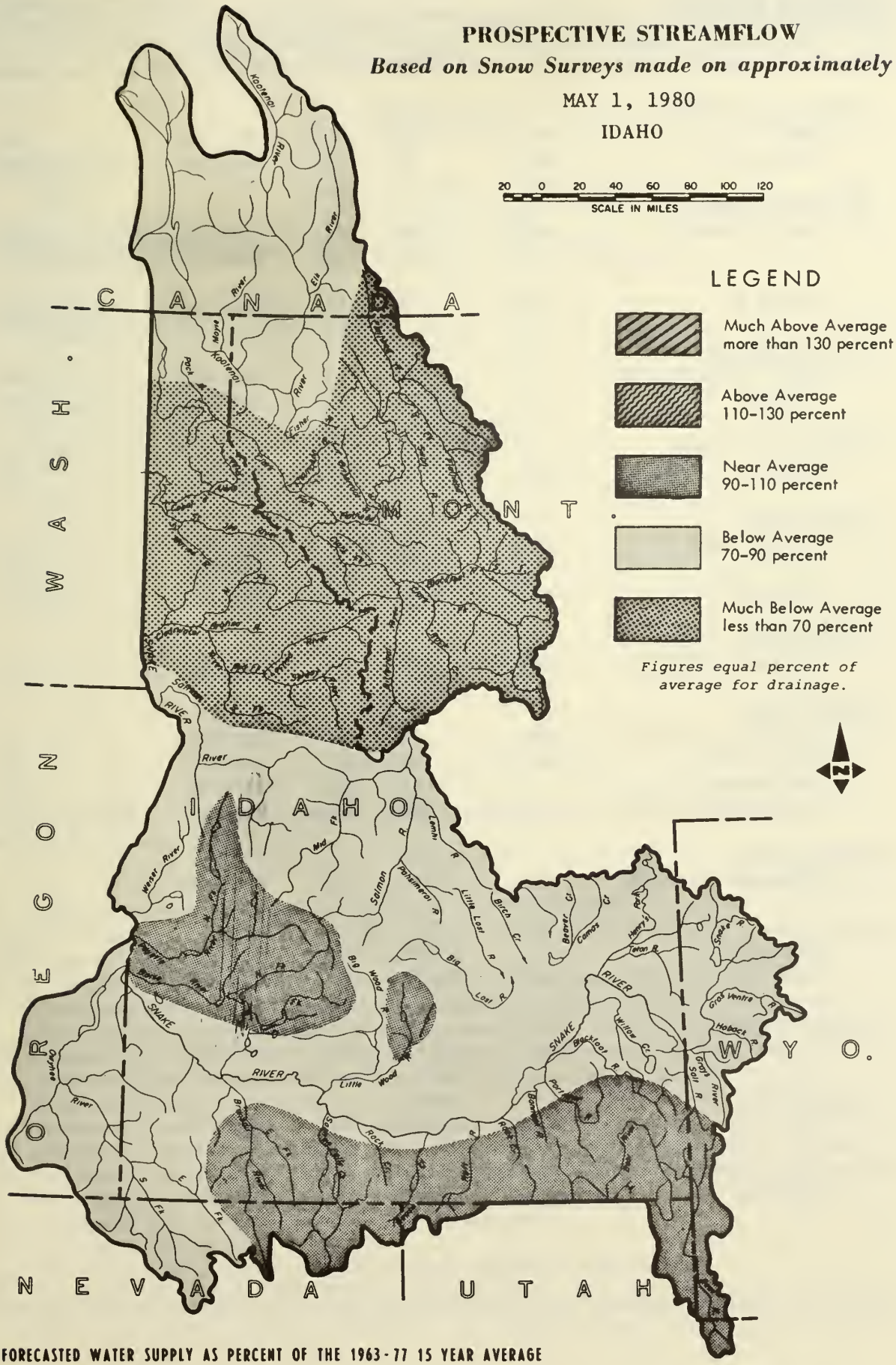


STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [+]
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	6590	81	May-Sep	--	8116
		5590	80	May-Jul	--	6966
		4300	80	May-Jun	--	5402
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	7590	62	May-Sep	--	12207
		6740	62	May-Jul	--	10945
		5600	62	May-Jun	--	9059
Priest River						
Priest River 1/	(nr)	580	80	May-Sep	--	723
		540	81	May-Jul	--	669
SPOKANE RIVER						
Post Falls 2/	(at)	1200	58	May-Sep	--	2052
St. Joe River						
Calder	(at)	645	61	May-Sep	--	1053
		600	61	May-Jul	--	984
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	750	83	Apr-Sep	--	903
Palisades Inflow		3250	84	Apr-Sep	--	3863
Heise 4/	(nr)	3100	81	May-Sep	--	3824
Blackfoot 5/	(nr)	3450	83	May-Jul	--	4143
Weiser	(at)	4860	90	May-Sep	--	5408
Henrys Fork						
Ashton 6/	(nr)	500	79	May-Sep	--	634
Rexburg 7/	(nr)	1080	78	May-Sep	--	1387
Portneuf River						
Topaz	(at)	65	92	May-Sep	--	71
Oakley Reservoir Inflow		22	92	May-Sep	--	24
Salmon Falls Creek						
San Jacinto	(nr)	60	95	May-Sep	--	63
		56	97	May-Jul	--	58
Bruneau River						
Hot Springs	(nr)	170	93	May-Sep	--	183

(c) Assuming normal meteorological conditions.

1963-1972 period.


PROSPECTIVE STREAMFLOW
Based on Snow Surveys made on approximately
MAY 1, 1980
IDAHO
20 0 20 40 60 80 100 120
SCALE IN MILES
LEGEND
Much Above Average more than 130 percent
Above Average 110-130 percent
Near Average 90-110 percent
Below Average 70-90 percent
Much Below Average less than 70 percent
Figures equal percent of average for drainage.
CANADA
WASH.
MONT.
IDAHO
OREGON
WYO.
NEVADA
UTAH
SNAKE RIVER
Salmon River
Weiser River
Payette River
Boise River
Big Wood R.
Little Wood R.
Big Lost R.
Little Lost R.
Birch Cr.
Beaver Cr.
Camas
Henry's Fork
Teton R.
Willow Cr.
Blackfoot R.
Portneuf R.
Raft R.
Bear River
Malad R.
Bruneau R.
Owyhee River
Gros Ventre R.
Hoback R.
Snake R.
Greys River
Soil R.
Kootenai River
Elk River
Moyie River
Pack R.
Clark Fork
Flathead R.
Swan R.
Blackfoot R.
Big Blackfoot R.
Little Blackfoot R.
Dearborn R.
Sun R.
Teton R.
Marias R.
Milk River
Musselshell R.
Yellowstone R.
Bighorn R.
Tongue R.
Powder R.
Little Missouri R.
Cheyenne R.
Big Horn R.
Wind R.
Popo Agie R.
Sweetwater R.
Platte R.
Little Snake R.
Green R.
Bear R.
Weber R.
Provo R.
Sevier R.
Virgin R.
Muddy R.
Bear R.
Logan R.
Cache R.
Little Bear R.
Jordan R.
Sanpete R.
Price R.
Dolores R.
Gunnison R.
Uncompahgre R.
Colorado R.
Eagle R.
Yampa R.
Green R.
Duchesne R.
Strawberry R.
Provo R.
Weber R.
Bear R.
Sevier R.
Virgin R.
Muddy R.
Little Colorado R.
Bill Williams R.
Gila R.
Salt R.
Verde

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Little Lost River						
Howe	(nr)	32	82	May-Sep	--	39
Wet Creek	(bl)	30	81	May-Sep	--	37
Big Lost River						
Howell Ranch	(at)	180	84	May-Sep	--	214
		125	87	May-Jun	--	144
Mackay 8/	(nr)	155	81	May-Sep	--	191
Big Wood River						
Magic Reservoir 9/		200	87	May-Sep	--	229
Inflow		190	89	May-Jul	--	213
Little Wood River						
Carey	(nr)	73	91	May-Sep	--	80
Boise River						
Twin Springs	(nr)	575	94	May-Sep	--	612
		530	95	May-Jul	--	559
Boise 10/	(nr)	1240	94	May-Sep	--	1326
South Fork						
Anderson Dam 11/	(at)	480	94	May-Sep	--	511
Owyhee River						
Gold Cr., Nev. 12/	(nr)	10	83	May-Jul	--	12
Owyhee, Nev.	(nr)	42	82	May-Jul	--	51
Lake Owyhee		184	82	May-Sep	222	224
net Inflow 13/		160	81	May-Jul	190	197
Payette River						
Horseshoe Bend 14/	(nr)	1530	98	May-Sep	--	1567
North Fork						
Cascade 15/	(at)	470	98	May-Sep	--	480
Banks 15/	(nr)	580	97	May-Sep	--	599
Weiser River						
Weiser	(nr)	270	89	May-Sep	--	304
Salmon River						
Whitebird	(at)	5330	81	May-Sep	--	6581
Clearwater River						
Spalding	(at)	4700	66	May-Sep	--	7081

(c) Assuming normal meteorological conditions.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
GREAT BASIN						
BEAR RIVER						
Harer	(at)	268	99	May-Sep	--	271
Montpelier Creek						
Montpelier	(nr)	12	100	May-Sep	--	12
Cub River						
Preston	(nr)	50	102	May-Sep	--	49

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake.
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River near Bellevue and Camas Creek near Blaine.
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wild Horse Reservoir.
13/ From WPRS records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.

(c) Assuming normal meteorological conditions.

† 1963-1977 period.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter April 1980		Fall - Winter Nov. 79 - April 80	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	2.03	+ .41	13.34	- 1.67
Flathead	1.31	- .33	9.78	- .59
Clark Fork	1.20	- .13	7.54	- 1.79
Pend Oreille-Spokane	1.99	+ .17	15.33	- 4.04
Upper Snake	1.04	- .75	10.23	- 1.67
Snake River Plain	.53	- .46	6.02	- .05
Salmon-Payette-Boise	1.48	+ .05	12.11	- 1.11
Clearwater	1.98	-1.14	16.04	- 4.96
Owyhee-Malheur	.70	- .05	6.28	- .14

1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Departure from 15-year (1963-77) drainage division average.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average ¹/
UPPER COLUMBIA RIVER BASIN							
KOOTENAI RIVER							
#Bear Mountain		5400	4/27	90	46.8	45.9	67.7*
Halverson Creek		4850	4/27	72	38.8	36.5	43.5*
Smith Creek		4800	4/29	71	32.5	31.4	47.4
PEND OREILLE - PRIEST RIVER							
Bear Mountain		5400	4/27	90	46.8	45.9	67.7*
Benton Meadow		2370	4/29	0	0.0	0.0	0.0*
Benton Spring		4900	4/29	9	4.0	16.7	16.7
Schweitzer Bowl		4500	5/1	21	10.7	21.3	26.8*
Schweitzer Ridge		6200	5/1	80	42.8	37.1	47.5*
SPOKANE RIVER							
Above Burke		4100	4/30	15	6.3	18.5	19.7*
#Forty-nine Meadows		4840	5/1	19	7.2	22.6	26.9
Granite Peak		6000	5/1	72	28.5	38.1	47.6*
Lookout		5120	4/30	40	17.4	28.2	35.4
#Lost Lake		6080	5/1	85	34.7	47.4	62.5
Lower Sands Creek		3400	4/28	18	6.4	18.3	18.3
Sherwin		3200	4/25	0	0.0	7.0	7.2*
LOWER SNAKE RIVER BASIN							
CLEARWATER							
Breezy Saddle		5000	5/1	23	8.9	25.1	--
Buck Meadows		5650	5/1	36	14.6	24.0	29.9*
Cayuse Airstrip		3500	5/1	0	0.0	0.0	1.0*
Coolwater Mountain		6200	5/1	61	22.8	34.7	35.5*
Crater Meadows		6100	5/1	68	28.8	40.6	47.8
Crooked Fork		3600	4/30	0	0.0	0.0	3.5*
Elk Butte		5420	5/1	28	11.4	--	34.1
Fish Lake Airstrip		5650	5/1	70	30.3	37.4	41.4*
Forty-nine Meadows		4840	5/1	19	7.2	22.6	26.9
Goat Lake		6500	5/1	83	37.0	45.0	51.9*
#Granite Peak		6000	5/1	72	28.5	38.1	47.6*
Hemlock Butte		5500	5/1	65	26.6	44.9	52.4
#Hoodoo Basin	Mont.	6000	4/27	89	44.0	49.6	55.6*
#Hoodoo Creek	Mont.	5900	4/27	81	39.8	49.3	52.0
Kit Carson Pasture		4950	4/27	0	0.0	2.6	--
Lolo Pass		5240	4/30	38	17.1	30.8	31.4
Lost Lake		6080	5/1	85	34.7	47.4	62.5

(*)1963 - 77, 15 year period #Not located directly on this drainage Estimated 1963 - 77 15 year average (A) Aerial observation Water content estimated (SP) Pressure Pillow snow water equivalent (R) Radioactive Gage snow water equivalent

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (Inches) Last Year	Average 1/
Mountain Meadows		6300	5/1	25	9.1	19.9	26.3*
#Nez Perce Pass	Mont.	6575	4/27	13	4.8	18.5	17.4
Pierce Ranger Station		3170	5/1	0	0.0	0.0	1.9
Savage Pass		6170	4/30	46	18.6	27.8	29.3*
Shanghai Summit		4600	5/1	4	1.6	23.0	23.1
SALMON RIVER							
#Banner Summit		7040	4/29	61	26.8	21.2	--
Big Creek Summit		6600	4/25	91	39.7	30.9	37.8
#Boulder Creek		5500	4/28	11	4.8	11.6	16.8
Brundage Mountain		7560	4/28	93	46.0	40.0	52.4*
#Deadwood Summit		6750	4/29	94	44.8	31.0	48.2*
#Galena Summit		8780	4/28	50	21.2	18.0	26.9
#Gibbons Pass	Mont.	7100	4/29	29	13.9	24.4	25.3
#Lemhi Pass	Mont.	7480	4/28	0	0.0	11.3	9.2
#Lemhi Ridge	Mont.	8100	4/28	14	4.8	15.1	10.6*
Mill Creek Summit		8800	4/29	48	21.2	16.5	25.9
Moose Creek		6200	4/30	16	4.2	12.1	16.6*
Morgan Creek		7580	4/29	13	5.4	9.2	13.9
#Rock Flat Summit		5340	4/28	29	12.8	13.8	17.9
#Secesh Summit		6520	4/26	73	34.3	27.5	36.9*
#Squaw Meadow		5900	4/26	76	36.4	27.2	36.1*
Vienna Mine		8950	4/29	83	40.8	30.1	39.9*
LEMHI RIVER							
Above Gilmore		8250	4/30	0	0.0	9.3	11.0*
Meadow Lake		9200	4/30	31	11.9	16.9	24.5*
MIDDLE SNAKE RIVER BASIN - NORTHSIDE							
LITTLE LOST RIVER							
Hilts Creek		8000	4/29	16	6.6	--	--
Wet Creek Summit		7760	4/29	8	3.2	--	13.8*
BIG LOST RIVER							
Bear Canyon		7920	4/26	45	17.4	13.5	18.9*
Copper Basin		7650	4/26	14	5.6	5.2	8.5*
Fishpole Lake		9350	4/26	58	24.2	16.6	--
Lost-Wood Divide		7900	4/26	43	18.6	15.6	24.8*
Stickney Mill		7450	4/26	15	6.2	5.2	6.5*

(b)1963-77, 15 year period #Not located directly on this drainage * Estimated 1963-77, 15 year Average (A) Aerial observation ‖Water content estimated (SP) Pressure Pillow snow water equivalent (R) Radioactive Gage snow water equivalent

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average ½
LITTLE WOOD RIVER						
#Bear Canyon	7920	4/26	45	17.4	13.5	18.9*
Garfield Ranger Station	6560	4/26	5	2.2	0.0	2.6*
Muldoon	6300	4/26	0	0.0	0.0	0.6*
Swede Peak	7640	4/26	33	14.4	11.2	16.7*
BIG WOOD RIVER						
#Couch Summit	6850	4/28	37	14.9	7.3	14.9*
Dollarhide Summit	8400	4/29	56	23.2	19.7	24.3*
Galena	7300	4/28	23	10.7	8.8	15.9
Galena Summit	8780	4/28	50	21.2	18.0	26.9
Graham Ranch	6280	4/28	20	7.8	5.6	9.2*
#Lost-Wood Divide	7900	4/26	43	18.6	15.6	24.8*
Mascot Mine	7760	4/26	33	13.3	10.6	15.5*
Mount Baldy	9000	4/29	54	21.4	14.7	23.6*
Soldier Ranger Station	6100	4/28	0	0.0	0.0	1.1*
#Vienna Mine	8950	4/29	83	40.8	30.1	39.9*
BOISE RIVER						
Atlanta Summit	7500	4/29	74	32.8	25.0	36.6
Bad Bear	5500	5/1	0	0.0	0.0	6.8
#Bogus Basin	6340	5/1	40	17.8	17.5	24.0*
Bogus Basin Road	5520	5/1	0	0.0	0.0	0.4*
Couch Summit	6850	4/28	37	14.9	7.3	14.9*
#Dollarhide Summit	8400	4/29	56	23.2	19.7	24.3*
Graham Guard Station	5690	4/29	10	4.7	0.0	--
Jackson Peak	7070	4/29	68	30.7	21.8	26.8*
Moores Creek Summit	6100	5/1	67	30.0	22.5	32.6
#Soldier Ranger Station	6100	4/28	0	0.0	0.0	1.1*
Trinity Mountain	7780	4/29	86	43.9	29.7	44.1*
#Vienna Mine	8950	4/29	83	40.8	30.1	39.9*
PAYETTE RIVER						
Banner Summit	7040	4/29	61	26.8	21.2	--
#Big Creek Summit	6600	4/25	91	39.7	30.9	37.8
Bogus Basin	6340	5/1	40	17.8	17.5	24.0*
#Brundage Mountain	7560	4/28	93	46.0	40.0	52.4*
Cozy Cove	5400	4/29	9	4.3	1.2	10.7*
Crawford Ranger Station	4800	4/25	0	0.0	0.0	0.4
Deadwood Airstrip	5440	4/29	11	5.4	2.6	8.6*
Deadwood Summit	7000	4/29	94	44.8	31.0	48.2*
#Jackson Peak	7070	4/29	68	30.7	21.8	26.8*
Lake Fork	6000	4/26	21	8.2	12.0	14.1*
Rock Flat Summit	5340	4/28	29	12.8	13.8	17.9
Secesh Summit	6520	4/26	73	34.3	27.5	36.9*
Squaw Meadow	5900	4/26	76	36.4	27.2	36.1*

(½) 1963-77, 15 year period #Not located directly on this drainage ~ Estimated 1963-77, 15 year average (A) Aerial observation Water content estimated (SP) Pressure Pillow snow water equivalent (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average [1]
WEISER RIVER							
Boulder Creek		5500	4/28	11	4.8	11.6	16.8
MIDDLE SNAKE RIVER BASIN - SOUTHSIDE							
RAFT RIVER							
Howell Canyon		7980	4/27	42	18.8	15.7	23.7*
SALMON FALLS CREEK							
#Bear Creek	Nev.	7800	5/2	38	15.2	23.1	21.2*
Goat Creek	Nev.	8800	5/1	46	18.3	17.5	20.8
Magic Mountain		6700	5/1	22	9.1	20.9	18.8*
#Pole Creek Rgr. Sta.	Nev.	8330	5/1	46	18.6	21.4	25.8*
BRUNEAU RIVER							
Bear Creek	Nev.	7800	5/2	38	15.2	23.1	21.2*
Pole Creek Rgr. Sta.	Nev.	8330	5/1	46	18.6	21.4	25.8*
#Seventy-six Creek	Nev.	7100	5/2	0	0.0	11.3	4.7*
OWYHEE RIVER							
#Bear Creek	Nev.	7800	5/2	38	15.2	23.1	21.2*
#Seventy-six Creek	Nev.	7100	5/2	0	0.0	11.3	4.7*
South Mountain		6340	4/27	19	9.2	11.6	7.1*
UPPER SNAKE RIVER BASIN							
HENRYS FORK RIVER							
Big Springs		6400	4/28	12	4.4	12.6	17.7
Grassy Lake	Wyo.	7230	4/28	53	23.5	39.6	36.4
Island Park		6290	4/28	0	0.0	9.8	11.4
Sawtell Mountain		8720	4/28	70	33.5	35.4	37.1*
Targhee Pass		7000	4/28	0	0.0	12.8	16.2*
Valley View		6740	4/28	0	0.0	13.0	14.5
White Elephant		7700	4/28	38	15.7	22.8	--

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year Average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent (R) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average 1/
TETON RIVER							
Freds Mountain	Wyo.	8150	5/1	33	14.3	4.7	21.1*
Indian Meadows	Wyo.	8240	5/3	55	25.5	35.8	39.9*
Jackpine Creek	Wyo.	7350	5/3	43	9.9	21.8	24.1*
McRenolds Reservoir		6800	5/3	0	0.0	19.9	19.8*
Phillips Bench	Wyo.	8200	5/1	56	23.7	33.2	31.5*
Pine Creek Pass		6750	5/1	0	0.0	15.2	14.8
State Line		6650	5/1	0	0.0	15.2	10.7
Teton Pass W.S.	Wyo.	8400	5/1	42	17.4	31.7	28.9*
BLACKFOOT RIVER							
Slug Creek Divide		7230	4/30	19	7.9	10.5	17.0*
Somsen Ranch		7000	5/2	12	4.5	--	--
Sulphur Peak		7070	5/2	12	4.8	--	--
Wood Canyon Divide		7450	5/2	21	9.0	--	--
GREAT BASIN							
BEAR RIVER							
Emigrant Summit		7380	4/30	41	19.4	19.1	24.9*
MONTPELIER CREEK							
Giveout		6840	4/30	15	6.2	7.4	6.9*
Little Beaver		6970	4/30	18	7.9	5.8	11.4*
Lower Home Canyon		7640	5/1	17	7.0	9.0	11.1*
Montpelier Creek		6570	4/30	0	0.0	0.0	1.2*
Upper Home Canyon		8560	5/1	49	20.1	20.4	24.5*
Whiskey Flat		6960	4/30	0	0.0	0.0	4.5*
CUB RIVER							
Cub River Rgr. Sta.		5400	4/28	0	0.0	0.0	0.0
#Franklin Basin		8000	4/28	49	23.0	25.0	--
Willow Flat		6100	4/28	6	2.3	10.2	5.5*

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year Average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent*

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service

U.S. Department of Commerce
NOAA, National Weather Service

U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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Water Supply Outlook For Idaho

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
JUNE 1, 1980

USDA SCS PORTLAND, OR 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR JUNE 1, 1980

The outlook for water supplies for Idaho is good to excellent for the 1980 season. The cool and extremely wet spring significantly increased runoff and reduced irrigation demands. Reservoir storage is good with all reservoirs having filled or expected to fill except for Oakley and Salmon Falls reservoirs in southern Idaho. Projected shortages in northern Idaho have been greatly alleviated by spring storms; however runoff is expected to drop sharply in the late summer and fall months.

Measurements at a limited number of snow courses near June 1, 1980 indicates a near normal snowpack remaining at high elevation sites.

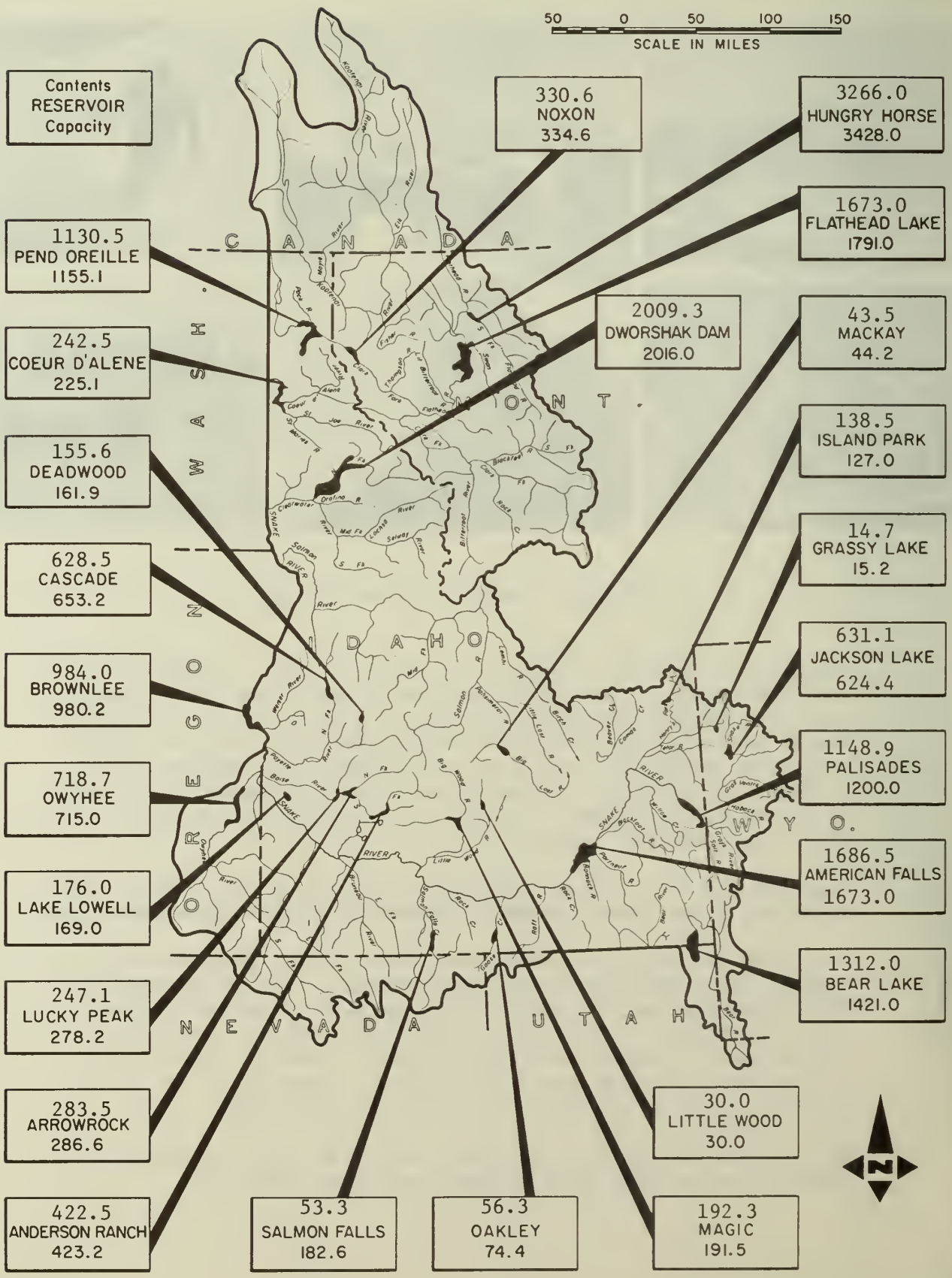
Statewide precipitation during May averaged more than double of normal while temperatures were near average. The valley precipitation average for the month was 202 percent of normal, ranging from 131 percent at Grangeville and 141 percent at Port Hill to 255 percent at Pocatello and 286 percent at Boise. Temperatures in Northern Idaho averaged 1 degree above normal while the southern part of the state averaged 3 degrees below normal.

This report carries the June 1 and supplemental measurements for 1980 and corrections of previously published 1980 data.

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JUNE 1, 1980



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]

JUNE 1, 1980 MEASUREMENTS

Atlanta Summit	7500	5/30	46	21.4	8.0	20.5*
Bear Canyon	7920	5/28	17	5.3	0.0	4.1*
Big Creek Summit	6600	5/28	55	22.8	13.0	18.6
Bogus Basin	6340	5/29	9	2.7	0.0	3.5*
Brundage Mountain	7560	5/29	65	31.8	21.8	36.9*
Copper Basin	7650	5/28	0	0.0	0.0	--
Crawford Ranger Station	4800	5/28	0	0.0	0.0	--
Cub River Ranger Station	5450	5/28	0	0.0	--	--
Dollarhide Summit	8400	5/30	44	19.9	5.1	--
Fishpole Lake	9350	5/28	53	23.1	0.0	--
Franklin Basin	8040	5/28	13	5.2	--	--
Freds Mountain	8000	5/30	T	T	0.0	--
Galena	7300	5/29	0	0.0	0.0	2.6*
Galena Summit	8780	5/29	32	13.0	0.0	13.9*
Garfield Ranger Station	6560	5/28	0	0.0	--	--
Graham Ranch	6270	5/29	0	0.0	--	--
Lake Fork	6000	5/27	0	0.0	0.0	--
Lookout	5140	5/3	0	0.0	3.7	15.0*
Lost Wood Divide	7900	5/28	16	6.2	0.0	--
Mascot Mine	7760	5/28	T	T	0.0	--
Moores Creek Summit	6100	5/29	28	12.6	4.0	12.5
Muldoon	6320	5/28	0	0.0	--	--
Pine Creek Pass	6750	5/30	0	0.0	0.0	--
Schweitzer Bowl	4500	5/30	0	0.0	0.0	--
Schweitzer Ridge	6200	5/30	11	5.4	16.7	--
Secesh Summit	6520	5/27	30	11.2	3.5	--
Squaw Meadow	5900	5/27	26	10.4	14.8	15.3*
State Line	6650	5/30	0	0.0	0.0	--
Stickney Mill	7430	5/28	0	0.0	0.0	--
Swede Peak	7640	5/28	5	1.4	--	--
Trinity Mountain	7780	5/30	59	29.7	10.6	25.7*
Vienna Mine	8950	5/30	62	30.7	16.0	29.4*
Willow Flat	6070	5/28	0	0.0	--	--

SUPPLEMENTAL MEASUREMENTS

DECEMBER 1, 1979

Buck Meadows	5650	12/3	19	5.3	--	--
Kruze Meadows	4800	11/29	13	2.3	2.4	--
Soldier Meadows	4640	11/29	11	1.5	2.5	--
Webb Creek	4720	11/29	13	1.9	2.4	--

*(b)1963–77, 15 year period. #Not located directly on this drainage. * Estimated 1963–77 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Average [b]

SUPPLEMENTAL MEASUREMENTS (Continued)

DECEMBER 15, 1979						
Trinity Mountain	7780	12/13	33	9.6	--	--
JANUARY 15, 1980						
Atlanta Summit	7500	1/16	90	23.1	11.6	--
Bad Bear	5500	1/14	37	10.0	7.2	--
Graham Guard Station	5690	1/16	38	10.6	7.0	--
Jackson Peak	7070	1/16	80	21.0	10.8	--
Kruze Meadows	4800	1/11	25	4.9	--	--
Moores Creek Summit	6100	1/14	72	20.7	12.3	--
Mount Baldy	9000	1/15	66	14.2	5.0	--
Pierce Ranger Station	3170	1/15	24	5.6	8.9	--
Soldier Meadows	4640	1/11	24	4.8	--	--
Trinity Mountain	7780	1/16	96	27.7	13.4	--
Vienna Mine	8960	1/16	96	26.1	13.2	--
Webb Creek	4720	1/11	26	5.2	--	--
FEBRUARY 15, 1980						
Atlanta Summit	7500	2/12	76	25.7	18.2	--
Bad Bear	5500	2/12	38	12.3	7.2	--
Crooked Fork	3600	2/18	27	7.2	12.2	--
Fish Lake Airstrip	5000	2/15	85	22.8	28.7	--
Graham Guard Station	5690	2/12	42	12.5	10.3	--
Hemlock Butte	5500	2/15	89	25.6	32.8	--
Jackson Peak	7070	2/12	74	24.8	--	--
Lolo Pass	5240	2/18	63	21.0	28.8	--
Moores Creek Summit	6100	2/12	70	24.5	34.2	--
Savage Pass	6170	2/18	61	19.2	23.4	--
Shanghai Summit	4600	2/15	50	12.4	23.0	--
Trinity Mountain	7780	2/12	87	31.6	26.5	--
Vienna Mine	8960	2/12	83	29.7	23.5	--
MARCH 15, 1980						
Above Burke	4100	3/13	47	12.8	21.6	--
Atlanta Summit	7500	3/18	105	35.2	21.6	--
Bad Bear	5500	3/13	35	12.6	11.6	--
Crooked Fork	3600	3/18	27	8.5	11.4	--
Elk Butte	5420	3/17	86	24.5	--	--
Fish Lake Airstrip	5000	3/17	107	30.9	31.5	--
Fourth of July Summit	3200	3/13	12	3.2	11.6	--
Galena	7300	3/17	61	18.3	10.7	--
Galena Summit	8795	3/17	71	21.4	12.6	--

*(b) 1963-77, 15 year period. # Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]

SUPPLEMENTAL MEASUREMENTS (Continued)

Graham Guard Station	5690	3/18	49	15.3	11.1	--
Hemlock Butte	5500	3/17	111	33.4	37.1	--
Jackson Peak	7070	3/18	100	34.2	20.5	--
Lolo Pass	5240	3/16	79	24.5	31.1	--
Lookout Pass	5120	3/12	81	24.8	28.8	--
Lost Lake	6000	3/17	129	37.5	38.2	--
Moores Creek Summit	6100	3/13	88	31.3	22.7	--
Mount Baldy	9000	3/14	69	21.1	12.0	--
Prairie	4900	3/14	4	1.5	5.4	--
Savage Pass	6170	3/17	76	24.8	23.4	--
Shanghai Summit	4600	3/17	58	15.3	23.0	--
Sherwin	3200	3/14	25	6.5	15.7	--
Trinity Mountain	7780	3/18	119	43.7	26.5	--
Vienna Mine	8960	3/18	105	39.1	23.5	--
APRIL 15, 1980						
Atlanta Summit	7500	4/14	108	41.1	25.3	--
Bad Bear	5500	4/14	32	12.7	7.3	--
Buck Meadows	5650	4/11	82	29.6	--	--
Fourth of July	3200	4/15	1	0.4	--	--
Galena	7300	4/14	54	20.1	19.6	--
Galena Summit	8795	4/14	74	27.0	17.3	--
Graham Guard Station	5690	4/14	43	16.5	7.4	--
Jackson Peak	7070	4/14	96	34.8	22.6	--
Lookout	5120	4/14	76	29.2	35.3	--
Moores Creek Summit	6100	4/14	96	37.6	24.0	--
Mount Baldy	9000	4/14	73	24.0	15.1	--
Prairie	4900	4/15	0	0.0	0.0	--
Trinity Mountain	7780	4/14	118	50.2	30.2	--
Vienna Mine	8960	4/14	98	39.0	--	--
MAY 15, 1980						
Atlanta Summit	7500	5/14	58	27.9	23.8	--
Galena Summit	8795	5/14	34	16.3	--	--
Jackson Peak	7070	5/14	47	23.5	--	--
Lookout	5120	5/15	5	2.4	20.0	--
Moores Creek Summit	6100	5/14	45	22.3	19.6	--
Trinity Mountain	7780	5/14	69	36.9	28.2	--

*(b)1963-77, 15 year period. #Not located directly on this drainage. * Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]

CORRECTIONS TO PREVIOUSLY PUBLISHED 1980 DATA

FEBRUARY 1, 1980

Darby	Wyo.	8250	1/31	49	14.1	14.2	15.4*
Sawtell Mountain		8720	1/29	68	22.7	14.7	22.8*
Upper Home Canyon		8560	2/1	60	16.5	14.2	16.3*

MARCH 1, 1980

Mud Creek		7150	2/29	67	19.3	11.9	--

APRIL 1, 1980

Crooked Fork		3600	3/28	25	8.9	11.0	14.1*

ADDITIONAL MEASUREMENTS RECEIVED TOO LATE TO BE PUBLISHED

Bear Basin		5350	4/28	37	14.0	15.8	--
Cold Springs		7000	4/5	77	30.4	19.8	--
Hummingbird Springs (A)	Nev.	8940	5/1	55	20.3	23.0	--
Kruze Meadows		4800	4/4	33	9.7	11.9	--
Putnam		7200	4/5	67	29.6	20.6	--
Soldier Meadow		4640	4/4	26	8.7	10.1	--
Toponce		6350	4/5	35	13.7	12.6	--
Webb Creek		4720	4/4	34	10.1	12.7	--

*(b)1963–77, 15 year period. #Not located directly on this drainage. * Estimated 1963–77 15 year average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent*

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers

U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service

U.S. Department of Commerce
NOAA, National Weather Service

U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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Water Supply Outlook For Idaho

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
JAN. 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL STATEMENT FOR JANUARY 1, 1981

Snow measurements taken at selected snow courses near January 1, 1981 indicate an extremely variable snow cover throughout Idaho. Snow accumulation varies greatly by elevation and geographically.

The snowpack is well below normal on all watersheds south of the Snake River from the Oregon line east to the Wyoming border. Also the Clearwater and Spokane watersheds in north Idaho have a well below normal snow cover. Several low and middle elevation sites in these areas are bare of snow for the first time on record. Snow cover on these watersheds varies from a low of 37 and 39 percent of average on the Bruneau and Spokane drainages respectively to 58 percent of normal on the Jordan Creek-Owyhee River drainage in southwestern Idaho. The Big and Little Wood and Big and Little Lost River watersheds in central Idaho are near normal at 97 and 108 percent of average respectively. All other drainages north of the Snake River and south of the Clearwater from the Oregon border to the Montana and Wyoming lines on the east are below average, ranging from 70 percent of average on the Teton drainage to 88 percent of normal on the Salmon River watershed. The Priest River and Pack River watersheds in far northern Idaho are also near 80 percent of normal.

Precipitation and temperatures averaged well above normal for Idaho during December. Precipitation was nearly double normal in northern

Idaho and less than half of average in the southeastern portion of the state. Kellogg reported 195 percent, McCall 175 percent and Salmon 152 percent of normal while Pocatello received only 37 percent of average for the month.

In general temperatures ranged up to 5° warmer than normal. The greatest variant however was not the low altitude temperatures but the freezing level elevation which was very high most of the month. During the late December storms when most of the precipitation fell, the freezing level was between 8 and 11 thousand feet. This meant that most of the precipitation fell as rain, which, combined with warm temperatures, removed much of the low and middle elevation snowpack.

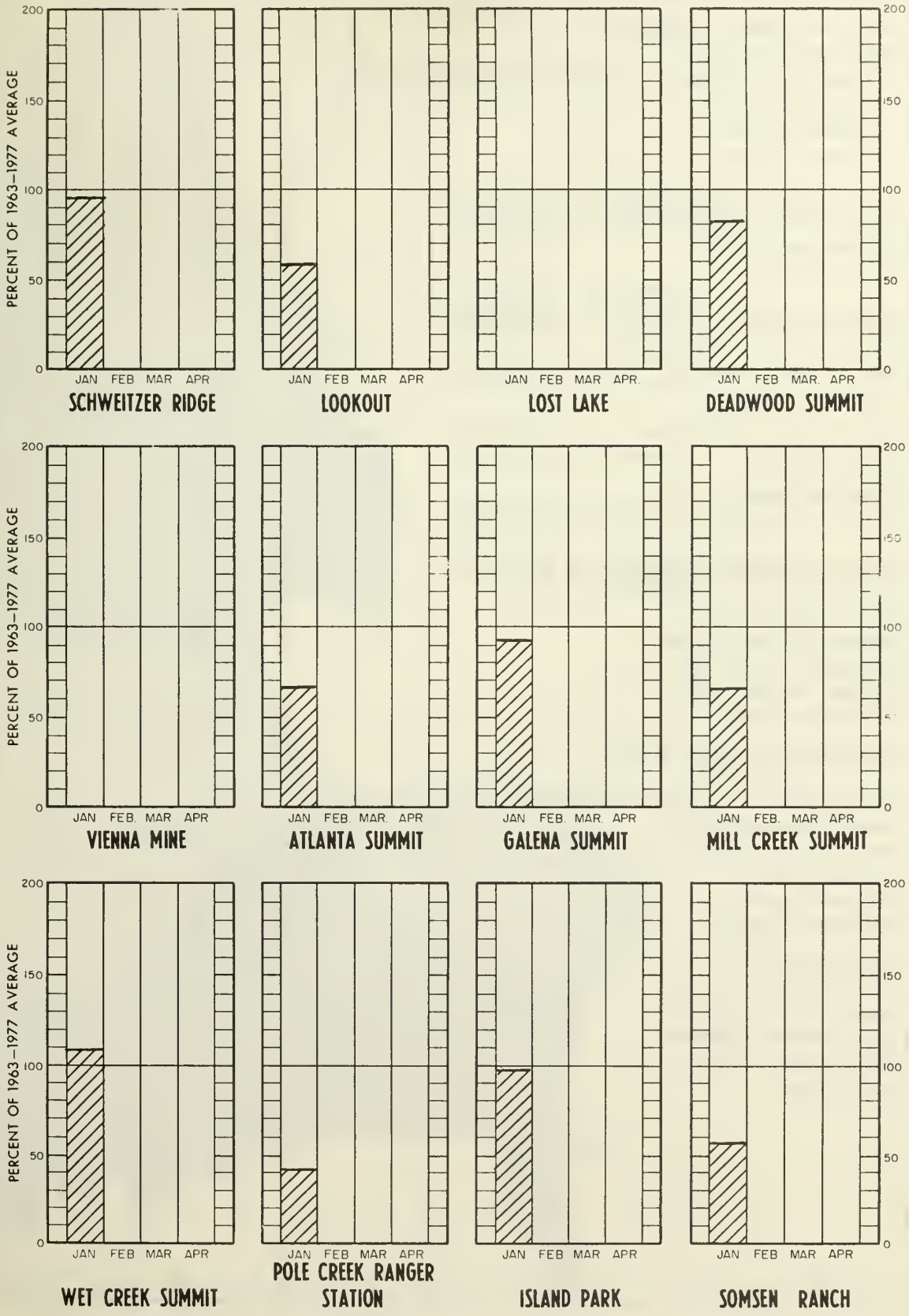
This combination of rain and melting snow resulted in rapid and excessive runoff in many areas with some flooding conditions in some locations.

Reservoir storage is good to excellent with combined storage of 16 irrigation reservoirs holding 110 percent of average as of January 1, 1981. This represents 71 percent of total usable capacity.

Seasonal runoff predictions for 1981 combined with the good storage indicate an adequate water supply for irrigation in most areas of Idaho. Local shortage may exist where storage facilities are not available.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

JANUARY 1, 1981



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF	
		LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River - Montana	6	116	77
Pend Oreille River	51	117	69
Clark Fork River	28	135	59
Flathead River	11	114	76
Priest River	4	95	80
Spokane River	3 - 4	80	39
LOWER SNAKE RIVER BASIN			
Clearwater River	9 - 12	81	49
Salmon River	11	124	88
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	3	-	108
Big Lost River	4	202	-
Little Wood River	3 - 4	147	97
Big Wood River	7 - 9	134	97
Boise River	10 - 12	99	73
Payette River	11 - 12	105	82
Weiser River	1	161	80
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	1	63	45
Salmon Falls Creek	4	58	52
Bruneau River	2	40	37
Owyhee River	4	77	51
Jordan Creek	1	45	58
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Res.	16	-	71
Camas-Beaver Creeks	2	146	75
Henrys Fork River	7	136	80
Teton River	4 - 6	113	70
Willow Creek	8	31	-
Blackfoot River	2	87	51
GREAT BASIN			
Bear River - Upper	3	90	46
Bear River - Lower	11	81	48
Montpelier Creek	4	103	41
Cub River	3	80	42

SNOW WATER DEPTHS
As percent of 1963-77 15 year average

JANUARY 1, 1981

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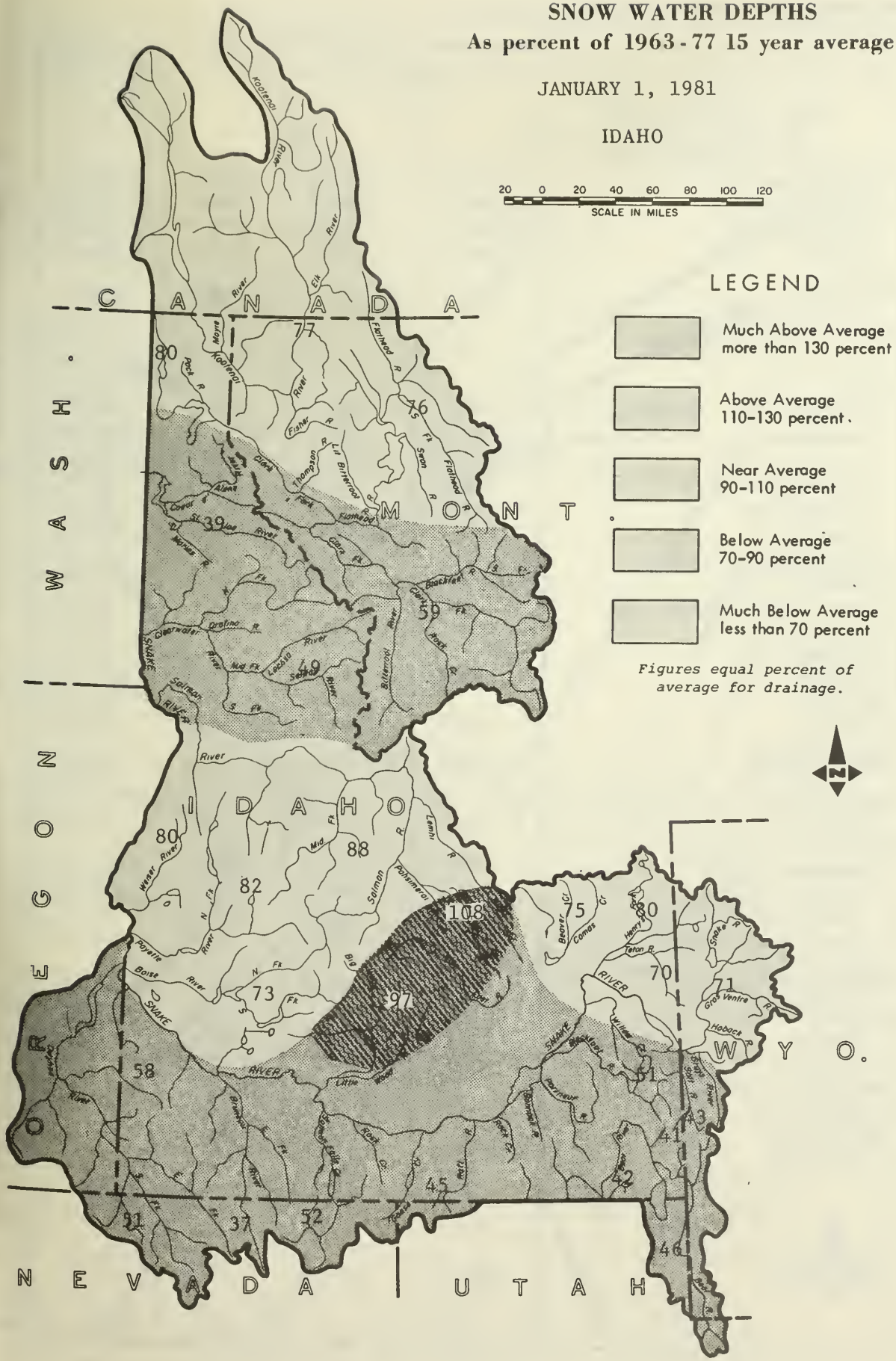


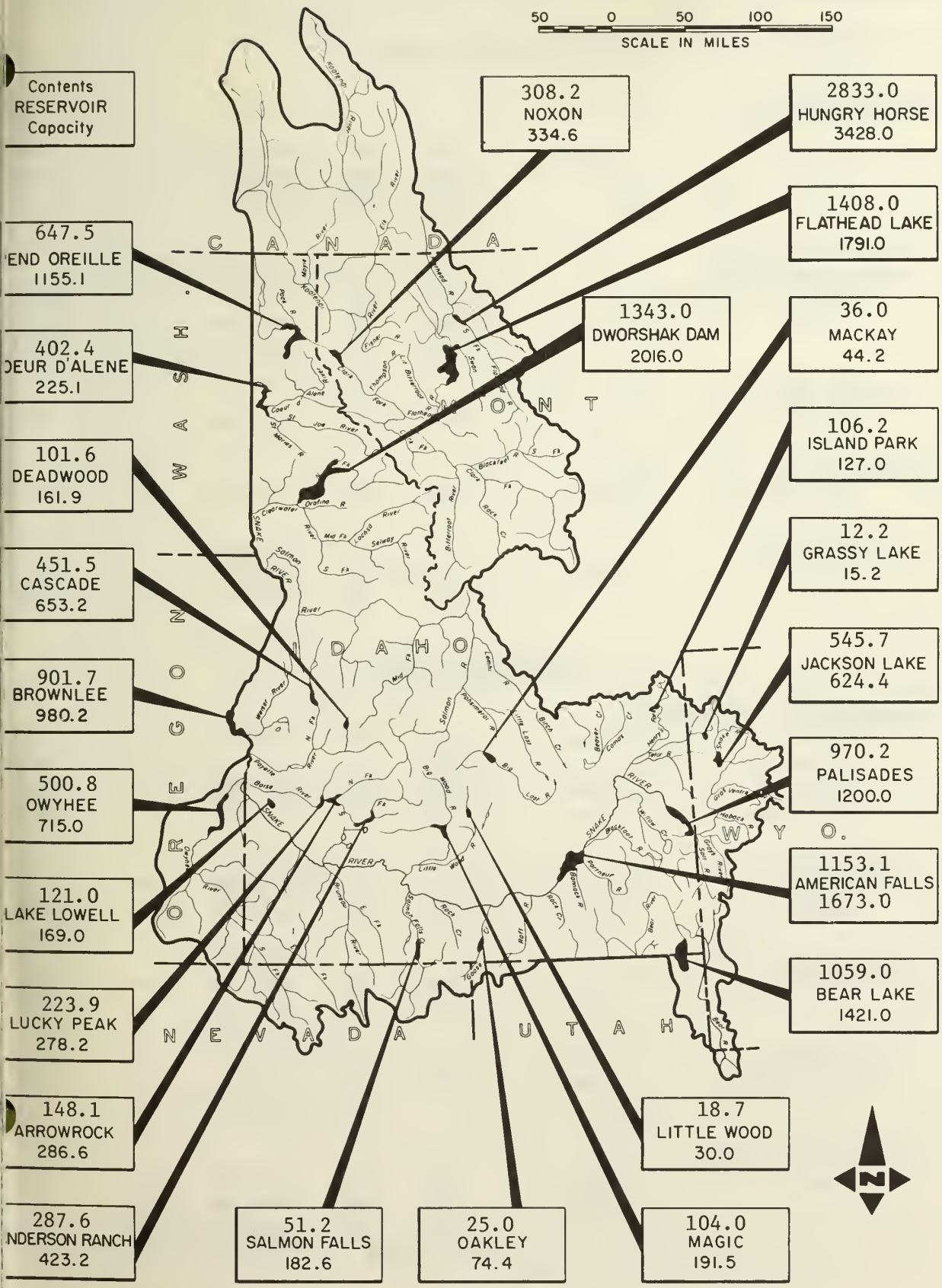
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2833.0	1610.0	2624.0
Flathead	1791.0	1408.0	548.9	1428.0
Pend Oreille	1155.1	647.5	145.5	331.1
Noxon	334.6	308.2	223.0	318.7
Spokane				
Coeur d'Alene	225.1	--	88.2	129.9
SNAKE BASIN				
Snake				
Jackson Lake	624.4	545.7	511.0	599.7
Palisades	1200.0	970.2	778.0	897.8
American Falls	1673.0	1153.1	726.5	1019.3
Island Park	127.0	106.2	70.1	92.4
Grassy Lake	15.2	12.2	10.8	10.1
Brownlee	980.2	901.7	688.1	808.1
Goose-Trapper Creeks				
Oakley	74.4	25.0	29.5	23.5
Salmon Falls Creek				
Salmon Falls	182.6	51.2	30.4	45.7
Big Lost				
Mackay	44.2	36.0	17.8	26.7
Big Wood				
Magic	191.5	104.0	14.5	98.4
Little Wood				
Little Wood	30.0	18.7	9.0	14.0
Fish Creek				
Carey Valley	14.4	4.8	2.0	--
Boise				
Anderson Ranch	423.2	287.6	208.1	301.1
Arrowrock	286.6	148.1	159.3	216.8
Lucky Peak	278.2	223.9	25.2	53.1
Lake Lowell (Deer Flat)	169.0	121.0	84.8	116.1
Owyhee				
Owyhee	715.0	500.8	459.4	405.5
Payette				
Cascade	653.2	451.5	218.7	379.0
Deadwood	161.9	101.6	50.0	74.3
Weiser				
Mann Creek	11.1	4.6	2.1	--
Clearwater				
Dworshak	2016.0	1343.0	1028.1	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1059.0	937.8	971.8

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JANUARY 1, 1981



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [4]
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	9590	108	Apr-Sep	--	8858
		8350	108	Apr-Jul	--	7708
		6600	108	Apr-Jun	--	6114
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	11600	84	Apr-Sep	--	13781
		10500	84	Apr-Jul	--	12519
		8930	84	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	799	95	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	1750	60	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	785	60	Apr-Sep	--	1309
		740	60	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	825	91	Apr-Sep	--	903
Palisades Inflow 3/		3520	91	Apr-Sep	--	3863
Heise 4/	(nr)	3820	90	Apr-Sep	--	4247
Blackfoot 5/	(nr)	4100	90	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	650	88	Apr-Sep	--	737
Rexburg 7/	(nr)	1330	87	Apr-Sep	--	1534
Salmon Falls Creek						
San Jacinto	(nr)	40	42	Mar-Sep	--	95
		38	42	Mar-Jul	--	90
Bruneau River						
Hot Springs	(nr)	130	52	Mar-Sep	--	251
Little Lost River						
Howe	(nr)	38	84	Apr-Sep	--	45
	(bl)	22	85	Apr-Jun	--	26
		35	85	Apr-Sep	--	41

(c) Assuming normal meteorological conditions.

1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Big Lost River						
Howell Ranch	(at)	215	96	Apr-Sep	--	225
		150	97	Apr-Jun	--	154
Mackay 8/	(nr)	190	93	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		285	89	Apr-Sep	--	319
Inflow 9/		290	87	Mar-Jul	--	332
Little Wood River						
Carey 10/	(nr)	93	87	Apr-Sep	--	107
		76	87	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	585	80	Apr-Sep	--	733
		540	80	Apr-Jul	--	676
Boise 11/	(nr)	1325	80	Apr-Sep	--	1656
		1090	80	Apr-Jun	--	1360
		1230	80	Apr-Jul	--	1536
South Fork						
Anderson Dam 12/	(at)	485	78	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev. 13/	(nr)	15	63	Apr-Jul	--	23
Owyhee, Nev. 13/	(nr)	50	63	Apr-Jul	--	80
Lake Owyhee		270	69	Apr-Sep	--	392
net inflow 14/		430	74	Feb-Jul	--	578
Payette River						
Horseshoe Bend 15/	(nr)	1620	87	Apr-Sep	--	1860
North Fork						
Cascade 16/	(at)	490	87	Apr-Sep	--	564
Banks 16/	(nr)	630	87	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	430	77	Mar-Sep	--	558
Salmon River						
Whitebird	(at)	6680	93	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	7110	82	Apr-Sep	--	8672

(c) Assuming normal meteorological conditions.

† 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
GREAT BASIN						
BEAR RIVER						
Harer	(at)	250	75	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	8.8	71	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	36	72	Apr-Sep	--	50
		34	72	Apr-Jul	--	47

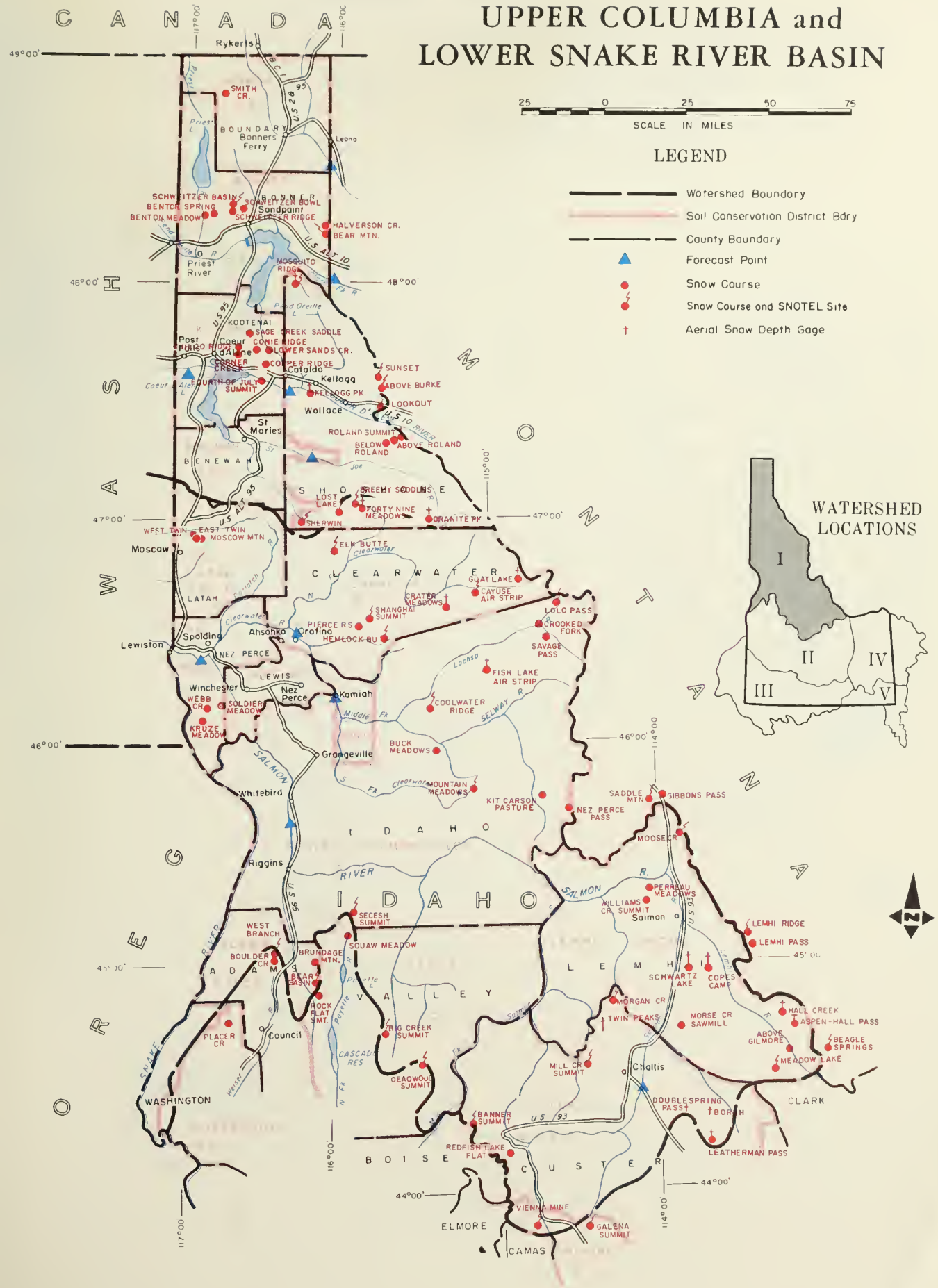
Cooperative forecasts released by Soil Conservation Service and National Weather Service.

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.
10/ Corrected for storage in Little Wood Reservoir.
11/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
12/ Corrected for storage in Anderson Ranch Reservoir.
13/ Corrected for storage in Wildhorse Reservoir.
14/ From WPRS records of inflow.
15/ Corrected for storage in Cascade and Deadwood Reservoirs.
16/ Corrected for storage in Cascade Reservoir.

(c) *Assuming normal meteorological conditions.*

+ 1963-1977 period.

UPPER COLUMBIA and LOWER SNAKE RIVER BASIN



INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		KOOTENAI RIVER				
16A7	I	Halverson Creek	3	57N	3E	4850
16A1	I	Smith Creek	29	64N	3W	4800
		PEND OREILLE-PRIEST RIVER				
16A8S	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4920
16A10S	I	Schweitzer Basin	18	58N	2W	6090
16A6	I	Schweitzer Bowl	20	58N	2W	4800
16A5	I	Schweitzer Ridge	19	58N	2W	6200
		HAYDEN CREEK				
16B8	1	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Saddle	10	52N	2W	4080
		SPOKANE RIVER				
15B8	1	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	35	47N	6E	3920
16B2	I	Copper Ridge	6	50N	1W	4820
16B3	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	4	42N	8E	6000
16B5A	1	Kellogg Peak	19	48N	3E	5560
15B2S	I	Lookout	4	47N	6E	5140
16B1	1	Lower Sands Creek	32	51N	1W	3120
16A4AS	I	Mosquito Ridge	5	54N	2E	5200
15B5A	I	Roland Summit	26	47N	6E	5120
16C1S	I	Sherwin	28	42N	1E	3200
15B9AS	I	Sunset	33	49N	5E	5540

LOWER SNAKE BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		PALOUSE RIVER				
16C3	I	East Twin	13	40N	5W	4130
16C2	1	Moscow Mountain	18	40N	4W	4410
16C4	I	West Twin	14	40N	5W	4220
		CLEARWATER RIVER				
15B20SR	1	Breezy Saddle	1	43N	4E	5010
15D5	I	Buck Meadows	27	31N	8E	5650
15C3S	I	Cayuse Airstrip	4	38N	11E	3500
15C7S	I	Coolwater Mountain	31	33N	8E	6040
15C9A	I	Crater Meadows	11	37N	9E	5960
14C11	I	Crooked Fork	27	37N	14E	3610
16C15	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	34	35N	11E	5650
15B3A	I	Forty-nine Meadows	6	43N	5E	4830
14C9A	I	Goat Lake	4	38N	13E	6500
16C6SR	I	Hemlock Butte	7	36N	7E	5810
15C10S	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	15E	4950
16C17	I	Kruze Meadows	11	32N	4W	4780
14C5S	I	Lolo Pass	16	38N	15E	5240
15B14S	1	Lost Lake	9	43N	4E	6110
15D6S	I	Mountain Meadows	9	27N	10E	6360
14D1	M	Nez Perce Pass	25	1S	24W	6570
15C5	I	Pierce Ranger Station	2	36N	5E	3080
14C4	I	Savage Pass	18	36N	15E	6170
15C4S	I	Shanghai Summit	7	37N	6E	4600
16C18	I	Soldier Meadows	33	33N	3W	4650
16C19	I	Webb Creek	36	33N	3½W	4720
		SALMON RIVER				
13E19	I	Above Gilmore	13	13N	26E	8240
13E21A	1	Aspen-Hall Pass	6	16N	28E	8200
16E11S	I	Bear Basin	30	19N	3E	5350
15E2S	I	Big Creek Summit	24	15N	5E	6580
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
13E17	I	Copes Camp	36	18N	22E	7520
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	19W	7100
13E20	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9860
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23S	M	Lemhi Ridge	4	10S	15W	8100
13E18S	I	Meadow Lake	26	13N	26E	9150
14E1S	I	Mill Creek Summit	8	13N	17E	8800
13D16S	I	Moose Creek	14	27N	21E	6200
14E4S	1	Morgan Creek	31	18N	19E	7600
13E26	I	Morse Creek Sawmill	8	15N	23E	7120
14D5	I	Perreau Meadows	23	21N	20E	8500
14E7	I	Redfish Lake Flat	35	10N	13E	6560
13E16	I	Schwartz Lake	34	18N	22E	8540
14E3A	I	Twin Peaks	28	15N	17E	9190
14F4S	I	Vienna Mine	1	5N	13E	8960
14D4	I	Williams Creek Summit	34	21N	20E	7990

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

USDA-SCS-PORTLAND, OR 1980 M7-OL-22023-1

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and SNOTEL Site
- Aerial Snow Depth Gage

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN
NORTHSIDE

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		LITTLE LOST RIVER				
13E5	I	Fairview Guard Station	27	12N	26E	6750
13E10S	I	Hilts Creek	15	8N	25E	8000
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6S	I	Moonshine	31	13N	26E	7440
13E4	I	Sawmill Canyon	17	12N	26E	7000
13E7	I	Wet Creek Summit	15	8N	25E	7680
		BIG LOST RIVER				
13F3S	I	Bear Canyon	22	5N	21E	7900
13F2	I	Copper Basin	26	6N	21E	7640
13F20	I	Dry Fork	23	3N	23E	7220
13F8	I	Fishpole Lake	28	4N	22E	9300
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6700
14F3S	I	Lost Wood Divide	25	6N	18E	7900
14F2S	I	Stickney Mill	9	6N	19E	7430
		BIG WOOD RIVER				
15F9	I	Camas Creeks Divide	11	2S	9E	5710
15F15	I	Chimney Creek	9	1N	12E	6400
14F8S	I	Dollarhide Summit	9	3N	15E	8420
14F1	I	Galena	4	6N	15E	7440
14F6S	I	Galena Snotel	4	6N	15E	7470
14F12S	I	Galena Summit	7	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6270
14F16S	I	Hyndman Creek	2	4N	19E	7440
14F7	I	Mascot Mine	8	4N	20E	7780
14F9	I	Mount Baldy	23	4N	17E	8920
14F11	I	Soldier Ranger Station	29	2N	14E	5740
		LITTLE WOOD RIVER				
13F4S	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	26	3N	21E	6320
13F9RS	I	Swede Peak	4	3N	21E	7640
		FISH CREEK				
13F10	I	Iron Mine Creek	33	3N	23E	6300
13F6	I	Telfer Ranch	7	2N	23E	5840
		BOISE RIVER				
15F4S	I	Atlanta Summit	23	5N	10E	7580
15F2	I	Bad Bear	35	7N	6E	4940
16F4	I	Bogus Basin Road	32	5N	3E	5540
		BOISE RIVER (cont.)				
14F10	I	Couch Summit	9	2N	14E	6840
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14SR	I	Graham Guard Station	9	7N	10E	5690
15E9S	I	Jackson Peak	7	8N	9E	7070
15F1SR	I	Moores Creek Summit	19	7N	7E	6100
15F6S	I	Prairie	13	2N	7E	4800
15F3	I	Road Creek	5	5N	8E	5380
15F5SR	I	Trinity Mountain	6	3N	9E	7770
		CANYON CREEK				
15F7S	I	Bennett Mountain	7	2S	9E	6560
15F12	I	Little Camas Flat	21	1S	9E	4940
		PAYETTE RIVER				
15E11S	I	Banner Summit	11	11N	10E	7040
16F2	I	Bogus Basin	16	5N	3E	6340
15E8SR	I	Cozy Cove	17	11N	7E	5380
15E3	I	Crawford Ranger Station	21	14N	4E	4860
15E10	I	Deadwood Airstrip	8	11N	7E	5360
15E4S	I	Deadwood Summit	13	14N	7E	6860
15E1	I	Lake Fork	3	18N	4E	5290
16E1	I	Rock Flat Summit	1	18N	2E	5310
15D1S	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5260
		WEISER RIVER				
16D1	I	Boulder Creek	16	20N	1W	5440
16E2	I	Placer Creek	15	17N	3W	5860
16E5S	I	Squaw Flat	32	17N	2E	6240
16D8S	I	West Branch	15	20N	1W	5560
		MANN CREEK				
6E10S	I	Bear Saddle	29	15N	5W	6180
16E9	I	Mann Creek	20	15N	5W	6080
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E2	I	Thorson Cabin	12	14N	6W	5320

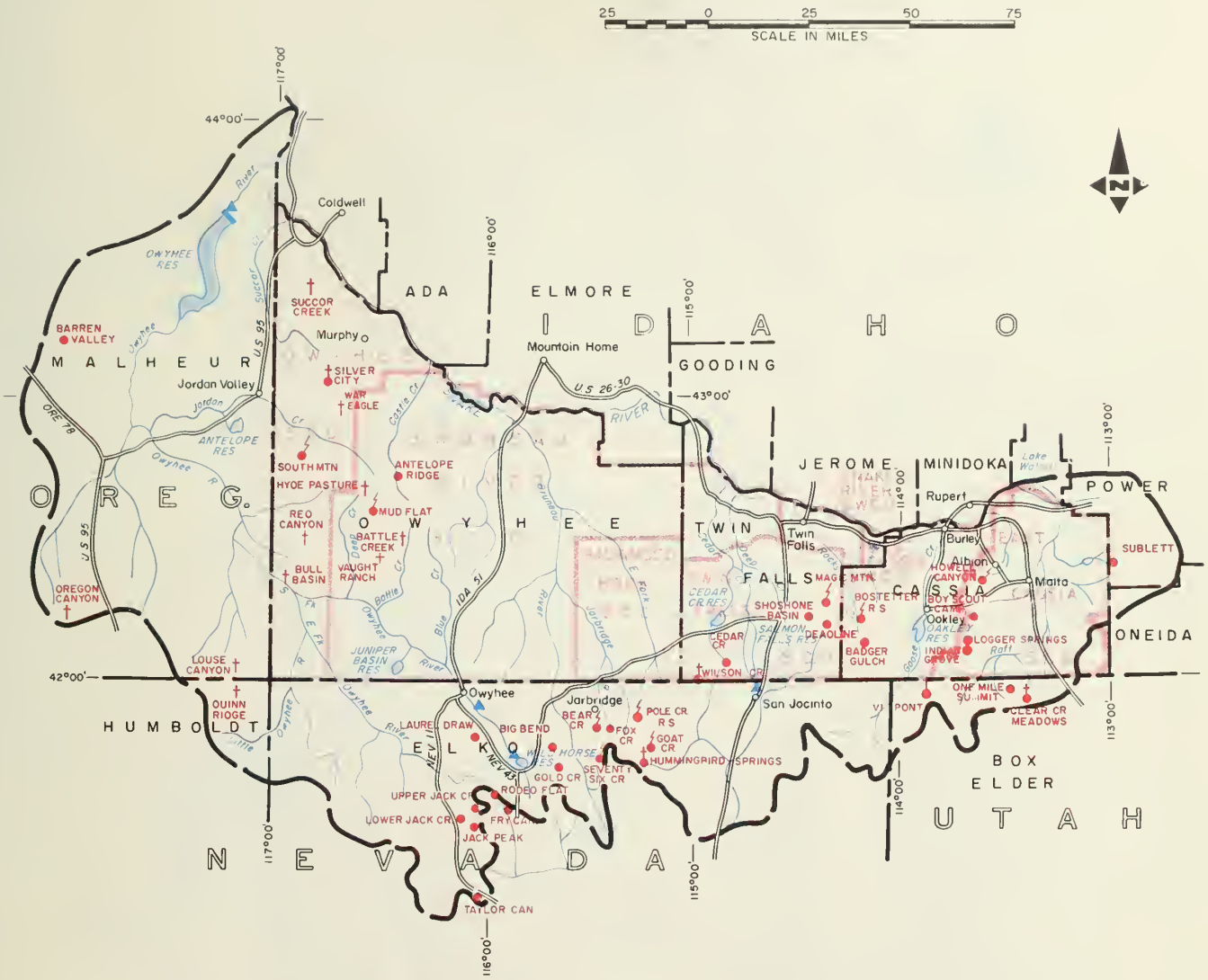
LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

USDA-SCS-PORTLAND, OR 1980 M7-OL-22023-2

MIDDLE SNAKE RIVER BASIN SOUTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forcast Point
- Snow Course
- Snow Course and SNOTEL Site
- Aerial Snow Depth Gage

INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN
SOUTHSIDE

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elevation
		RAFT RIVER				
13G2	1	Boy Scout Camp	8	14S	24E	7740
13H2	U	Clear Creek Meadows	26	14N	14W	9420
13G1S	1	Howell Canyon	2	13S	24E	7980
13G4	1	Indian Grove	14	15S	23E	7560
13G3	I	Logger Springs	2	15S	23E	8120
13H1	U	One Mile Summit	17	14N	14W	7330
12G8	1	Sublett	17	12S	30E	5950
		GOOSE - TRAPPER CREEK				
14G3	1	Badger Gulch	24	15S	19E	6660
14G1S	1	Bostetter Ranger Station	35	14S	19E	7500
13H3A	U	Vi Pont	17	14N	17W	7670
		SALMON FALLS CREEK				
14G5	1	Cedar Creek	26	15S	13E	6800
14G4	1	Deadline	25	14S	18E	6900
15H13S	N	Goat Creek	31	46N	60E	8880
14G2S	1	Magic Mountain	25	14S	18E	6880
14G6	1	Shoshone Basin	24	14S	17E	5810
15G2	1	Wilson Creek	24	16S	12E	7500
		BRUNEAU RIVER				
15H1S	N	Bear Creek	31	46N	58E	8040
15H2	N	Fox Creek	33	46N	58E	6750
15H15	N	Hummingbird Springs	12	45N	59E	8870
15H14S	N	Pole Creek Ranger Station	13	46N	50E	8360
15H3S	N	Seventy-six Creek	6	44N	58E	7100
		OWYHEE RIVER				
16G6	1	Antelope Ridge	35	8S	1W	6140
18F5	O	Barren Valley	26	17S	38E	4200
16G9A	1	Battle Creek	10	11S	1E	5720
15H4	N	Big Bend	30	45N	56E	6700
16G10A	1	Bull Basin	29	12S	5W	5460
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
16G5A	I	Hyde Pasture	31	8S	2W	5760
16H4	N	Jacks Peak	28	42N	53E	8420
16H5	N	Laurel Draw	20	45N	53E	6700
17G4A	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	18	42N	53E	6800
16G7S	I	Mud Flat	34	9S	2W	5730
17G5A	O	Oregon Canyon	9	40S	40E	6950
17H6A	N	Quinn Ridge	9	47N	41E	6300
16G11A	1	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3	1	Silver City	7	5S	3W	6400
16G1S	I	South Mountain	35	7S	5W	6500
16F6A	1	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12A	1	Vaught Ranch	10	11S	1W	5950
16G13A	1	War Eagle	20	5S	3W	7280

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

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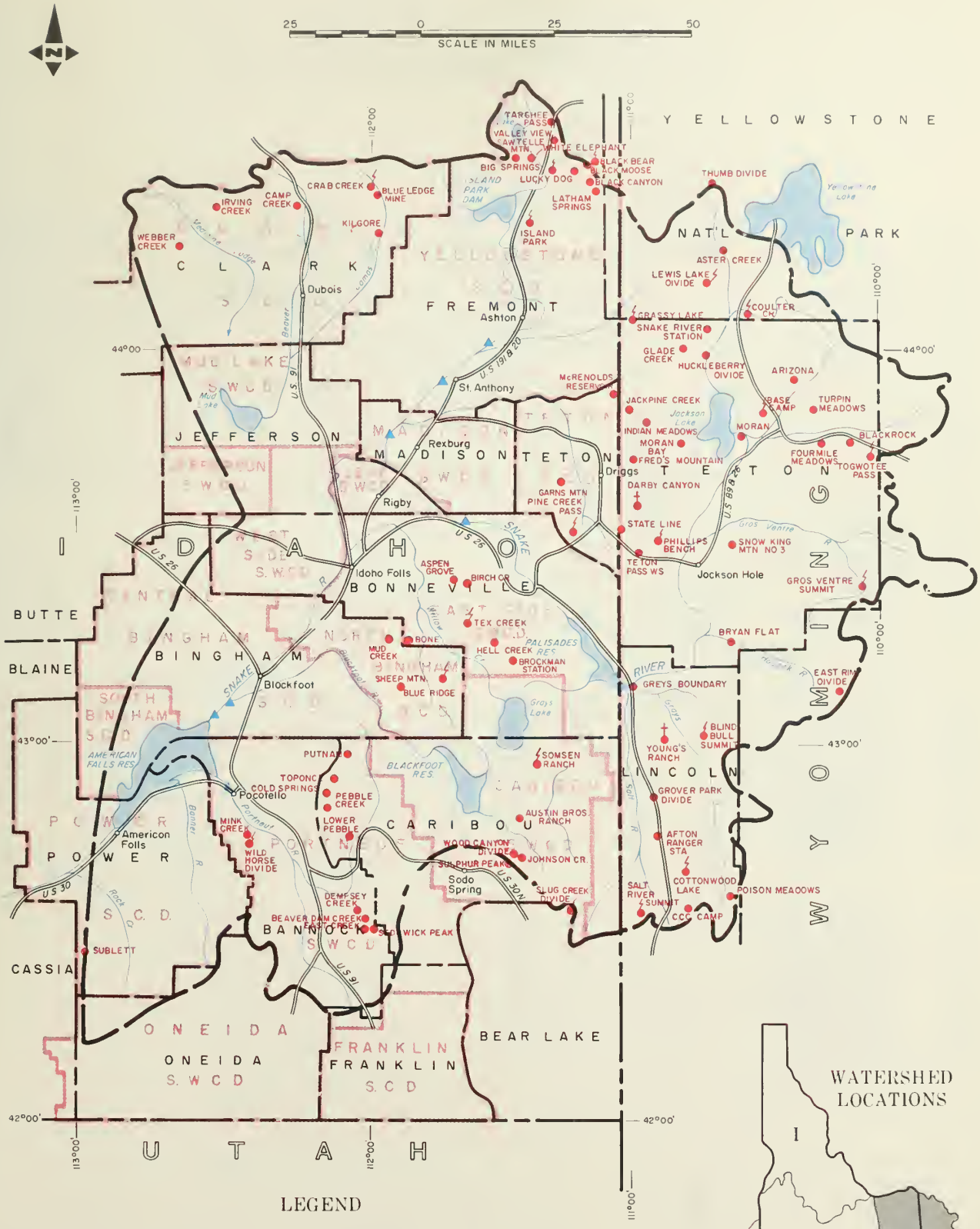
UPPER SNAKE RIVER BASIN



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INDEX to SNOW COURSES

GREAT BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elevation
		BEAR RIVER				
10G11	Wy	Big Park	7	27N	117W	8700
11H13P	U	Dry Bread Pond	19	8N	4E	8230
11G7	I	Emigration Canyon	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burts-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	1S	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300
		MONTPELIER CREEK				
11G16	I	Giveout	2	12S	45E	6840
11G25S	I	Giveout Snotel	2	12S	45E	6930
11G20	I	Little Beaver	27	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7640
11G18	I	Montpelier Creek	14	12S	45E	6540
11G26	I	Upper Home Canyon	31	11S	45E	8560
11G21	I	Whiskey Flat	26	11S	45E	6960
		MINK CREEK				
11G11	I	Christensen Ranch	27	13S	41E	5560
11G14A	I	Dry Basin	30	13S	42E	7820
11G6S	I	Emigrant Summit	21	12S	42E	7390
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13	I	Liberty Spring	7	13S	42E	8600
11G9	I	Strawberry Creek	9	13S	41E	5820
11G10	I	Strawberry Mink Divide	14	13S	41E	6720
		CUB RIVER				
11G12	I	Cub River Ranger Station	9	15S	41E	5450
11G8	I	Franklin Basin	1	16S	41E	8040
11G2S	I	Franklin Basin Sno	7	16S	42E	8170
11G4	I	Willow Flat	11	15S	41E	6070
11G28	I	Worm Creek	28	14S	41E	6620
		MALAD RIVER				
12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6270
12G4	I	Dry Creek Flat	33	13S	37E	6360
12G11	I	Lower Elkhorn	30	12S	36E	6960
12G3	I	Oxford Mountain	27	13S	37E	6800
12G18S	I	Oxford Spring	27	13S	37E	6740
12G10	I	Upper Elkhorn	25	12S	35E	7140

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage
10J7P	Precipitation gage

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SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average b/
Above Burke	4100	1/2	11	3.0	5.0	9.3*
Antelope Ridge	6140	1/1	0	0.0	--	--
Atlanta Summit	7600	12/29	31	10.1	10.7	15.2*
Atlanta Townsite	5280	12/31	11	3.0	--	--
Bad Bear	4940	1/2	11	3.7	4.2	5.2*
Banner Summit	7040	12/31	36	11.7	10.1	--
Bear Basin	5350	12/29	25	7.0	--	--
Bear Canyon	7900	12/30	29	8.2	4.0	--
Bear Saddle	6180	12/27	23	7.5	--	--
Bennett Mountain	6560	12/29	15	5.4	--	--
Benton Meadow	2370	12/30	0	0.0	1.1	2.9
Benton Spring	4920	12/30	19	6.3	5.9	8.3
Big Creek Summit	6580	12/28	39	12.2	11.8	14.7
Big Springs	6500	12/30	23	6.7	3.9	7.8
Birch Creek	6800	12/31	0	0.0	3.0	--
Blue Ridge	6780	12/31	0	0.0	4.0	--
Bogus Basin	6340	12/29	16	5.0	8.3	9.6
Bogus Basin Road	5540	12/29	0	0.0	2.0	2.9*
Bone	6200	12/31	0	0.0	0.9	3.0*
Bostetter Ranger Station	7500	12/29	16	4.5	--	--
Boulder Creek	5440	12/31	26	8.2	5.1	10.2
Breezy Saddle	5010	12/31	20	6.0	6.8	--
Brockman Station	6430	12/31	7	2.3	2.6	--
Brundage Mountain	7560	12/29	51	18.2	19.5	18.9*
Camp Creek	6580	12/31	13	3.0	2.2	4.8
Cayuse Airstrip	3500	12/31	4	1.3	1.8	5.1*
Copper Basin	7640	12/30	14	4.4	0.5	--
Couch Summit	6840	12/29	27	8.5	5.6	7.2*
Cozy Cove	5380	12/31	19	5.6	6.0	7.0
Crater Meadows	5960	12/31	29	11.9	14.0	18.3*
Crawford Ranger Station	4860	12/29	8	2.1	3.3	3.0*
Crooked Fork	3610	12/30	7	2.6	2.0	5.1*
Cub River Ranger Station	5450	12/27	5	1.5	2.5	3.4*
Darby Canyon (Wy)	8250	1/2	22	6.1	6.0	9.5*
Deadline	6900	12/31	17	5.4	7.6	8.7*
Deadwood Airstrip	5360	12/31	18	6.2	5.5	6.3*
Deadwood Summit	6860	12/31	57	18.4	15.2	22.7*
Dollarhide Summit	8420	12/30	28	8.2	7.6	12.4*
Elk Butte	5550	12/31	21	6.0	--	--
Emigrant Summit	7390	12/29	15	4.2	5.2	9.4*
Fairview Guard Station	6750	12/31	11	2.0	--	1.8*
Fish Lake Airstrip	5650	12/31	27	9.6	11.7	16.1*
Forty-nine Meadows	4830	12/31	21	6.0	7.0	--
Franklin Basin	8040	12/27	14	3.4	4.1	9.9
Franklin Basin Snotel	8170	12/27	18	4.8	--	--
Freds Mountain (Wy)	8150	12/31	26	6.5	6.0	8.6*
Galena	7440	12/31	29	8.6	6.1	7.8
Galena Summit	8780	12/31	32	9.6	6.9	10.4

*(b)1963–77, 15 year period. #Not located directly on this drainage. * Estimated 1963–77 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [1]
Garfield Ranger Station	6560	12/30	17	5.2	4.0	4.1*
Gibbons Pass (Mt)	7100	12/29	35	10.5	5.8	9.1
Giveout	6860	12/30	11	2.2	2.3	4.8
Goat Creek (Nv)	8880	12/30	11	2.3	6.6	7.8*
Graham Guard Station	5690	12/31	18	4.9	5.0	--
Graham Ranch	6270	12/31	25	6.2	4.1	5.6
Grassy Lake (Wy)	7265	12/29	38	10.1	7.1	14.4
Hell Creek	7350	12/31	17	4.9	3.2	--
Hemlock Butte	5810	12/31	24	7.9	13.5	20.8*
Hilts Creek	8000	12/29	20	6.0	--	--
Hoodoo Basin (Mt)	6000				18.8	22.3*
Hoodoo Creek (Mt)	5900				14.8	18.8*
Howell Canyon	7980	12/30	15	4.7	7.5	10.5
Hyndman Creek	7740	12/30	25	7.3	--	--
Idaho City	4000	1/2	6	2.2	--	--
Island Park	6315	12/30	22	6.1	4.0	6.2
Jackpine Creek (Wy)	7350	1/2	16	4.8	5.2	--
Jackson Peak	7070	12/31	35	11.1	9.4	15.1*
Kilgore	6320	12/31	17	4.0	2.6	4.5
Lake Fork	5290	12/28	18	4.9	4.3	6.5*
Little Beaver	6970	12/30	9	1.9	2.0	5.7
Little Camas Flat	4940	12/29	10	4.2	--	--
Lolo Pass	5250	12/30	21	6.7	8.8	11.5*
Lookout	5140	1/2	25	8.0	10.4	13.7
Lost Garfield	6600	12/31	10	2.0	--	1.6*
Lost Lake	6110	12/31	46	15.1	16.0	--
Lost Wood Divide	7900	12/30	31	9.4	6.4	--
Magic Mountain	6880	12/31	18	5.4	6.3	7.5*
Mascot Mine	7780	12/30	22	6.8	4.5	--
McRenolds Reservoir	6720	1/2	19	5.2	4.6	--
Mill Creek Summit	8800	12/29	30	8.6	6.5	13.3*
Montpelier Creek	6540	12/30	5	1.3	1.4	3.4
Moonshine	7440	12/31	15	4.4	--	4.3*
Moores Creek Summit	6100	1/2	28	9.2	9.2	13.0
Moose Creek	6200	12/31	23	7.4	3.2	6.9*
Morgan Creek	7600	12/30	16	4.3	3.8	2.6*
Mount Baldy	8920	12/30	30	9.0	6.8	8.7*
Mud Creek	7100	12/31	0	0.0	3.7	--
Mud Flat	5730	1/1	5	1.5	--	--
Muldoon	6320	12/30	12	3.0	3.0	3.2*
Packsaddle Springs	8200	1/3	22	7.1	--	--
Pierce Ranger Station	3080	12/29	0	0.0	--	4.2
Pine Creek Pass	6810	12/30	16	4.8	3.3	6.9
Pole Creek Ranger Station	8360	12/30	14	4.0	9.0	9.1*
Rammel Mountain	8240	1/2	35	10.0	--	--
Rock Flat Summit	5310	12/29	24	6.0	6.0	7.1
Savage Pass	6170	12/30	28	9.6	7.7	10.2*
Sawmill Canyon	7000	12/31	13	3.5	--	3.3*

*(b)1963–77, 15 year period. #Not located directly on this drainage. * Estimated 1963–77 15 year Average. (A) Aerial observation Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average [b]
Sawtell Mountain	8720	12/30	39	11.8	10.6	14.1*
Schweitzer Bowl	4800	12/31	30	10.2	11.0	13.0*
Schweitzer Ridge	6200	12/31	48	19.2	19.7	20.3*
Secesh Summit	6520	12/29	42	13.6	10.5	16.6
Shanghai Summit	4570	12/31	0	0.0	5.0	9.9*
Sheep Mountain	6570	12/31	0	0.0	2.7	--
Sherwin	3200	12/30	0	0.0	1.8	5.5*
Slug Creek Divide	7230	12/29	14	3.4	3.7	7.5*
Soldier Ranger Station	5740	12/29	15	5.3	5.5	4.9*
Somsen Ranch	6840	12/29	13	3.3	4.0	5.7*
South Mountain	6500	1/1	6	3.0	6.6	5.2
Squaw Flat	6240	12/28	28	8.8	--	--
Squaw Meadow	5900	12/29	41	15.1	11.8	16.8*
State Line	6660	12/30	14	4.3	3.0	5.9
Stickney Mill	7430	12/30	16	4.6	2.3	--
Swede Peak	7640	12/30	24	7.1	5.0	8.4*
Targhee Pass	6980	12/30	15	3.7	2.7	6.2*
Tex Creek	6650	12/31	0	0.0	3.0	--
Trinity Mountain	7770	12/29	35	12.3	13.5	15.6*
Valley View	6680	12/30	17	4.5	2.8	6.4
Vienna Mine	8960	12/31	41	12.3	10.4	--
West Branch	5560	12/31	31	9.9	--	3.9*
Wet Creek Summit	7680	12/29	17	4.8	--	4.4*
Whiskey Flat	6960	12/30	6	1.7	1.2	3.6
White Elephant	7710	12/30	31	8.0	6.3	8.9*
Willow Flat	6070	12/27	8	3.1	3.4	5.9*

*(b)1963–77, 15 year period. #Not located directly on this drainage. * Estimated 1963–77 15 year average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.*

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
ESCS Crop Reporting Service
SEA Agricultural Research

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Water and Power Resources Service
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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304 N. 8TH ST.
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Water Supply Outlook For Idaho

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
FEB. 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

CAUTION

Irrigators May Face a Water Shortage This Year

SNOW COURSE MEASUREMENTS MADE ON FEBRUARY 1, 1981, INDICATE THAT LOW FLOWS WILL OCCUR IN MANY STREAMS. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE TO YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, REDUCE PLANTED ACREAGE, ADJUST TIMING OF WATER APPLICATION, OR IMPROVE EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM.

THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

CHANGE CROPS	Plant crops which require less water.
REDUCE ACREAGE	Reduce your crop acreage. This will help you make better use of your water as well as reduce the amount of seed and fertilizer you need to buy. Be sure to use cover crops to prevent wind erosion on land you don't irrigate.
CONSIDER ENERGY COSTS	Even if you are able to pump supplemental water, you should compare inflated energy costs with anticipated crop earnings. You may be money ahead to reduce acreage or change crops.
CHECK IRRIGATION SYSTEM	Check your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery, sprinkler heads don't have leaks, pipes have tight connections, and pumps work properly. If new parts or equipment are needed, buy them early.
PLANT BEST LAND	Plant only your best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service (SCS) personnel can guide you. If not, they can still give you general information.
TECHNICAL ASSISTANCE?	Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecast, and for soil information. SCS has water conservation pamphlets and other information that can help irrigators get by with less water.
COST-SHARE OR LOANS?	Maintain close contact with local offices of Agricultural Stabilization and Conservation Service (ASCS) and the Farmers Home Administration (FmHA). If a drought situation develops, funds might be made available for cost-sharing or loans to help you apply special water conservation practices.
CROPS, FEED, FERTILIZER, OR MARKETING QUESTIONS?	Contact your local Cooperative Extension Service office for crop selection alternatives, fertilizer recommendations, feed supply conditions, and marketing outlook.

SCS, ASCS, AND FmHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." COOPERATIVE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR FEBRUARY 1, 1981

The below normal snowpack conditions recorded near the first of the year deteriorated appreciably during January. Measurements near February 1, 1981 indicate a generally well below average snow water accumulation throughout Idaho and the Snake River tributaries in adjacent states. Snow cover as of February 1 varies from a low of near 30 percent of normal on the Raft River and Montpelier Creek watersheds to a high of near 80 percent of average on the Big Lost and Little Wood drainages.

In general, the snowpack in the Great Basin drainage in southeastern Idaho and the watersheds south of the Snake River are 35-40 percent of average. Northern Idaho watersheds from the Clearwater River north are also 35-40 percent of normal. The upper Snake River and tributary watersheds above American Falls are 55 to 65 percent of average except for the Blackfoot at 40 percent of normal. The Boise, Payette, Weiser and Salmon River watersheds are in the 55-60 percent of normal range, while the Wood and Lost River drainages are in the best condition in the State at 70-80 percent of average.

Valley precipitation was below average for January across Idaho while the temperature was slightly warmer than normal. Precipitation was far below normal in some areas such as Salmon with 15 percent and Porthill with 38 percent. Boise was the highest with 86 percent. Precipitation since October 1 has been about 80 percent of normal. While 80 percent is not real bad the biggest problem is that much of

this 80 percent came in late December in the form of rain and depleted much of the snowpack. The freezing level lowered during January allowing much of the precipitation to fall in the form of snow.

Reservoir storage is good to excellent. A combination of 16 irrigation reservoirs in the Snake River Basin shows storage at 112 percent of normal as of February 1.

Forecasts of seasonal runoff for 1981 are below to well below average. Irrigation water supplies are expected to be adequate for areas which have reservoir facilities but shortages can be experienced on drainages with no stored water.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

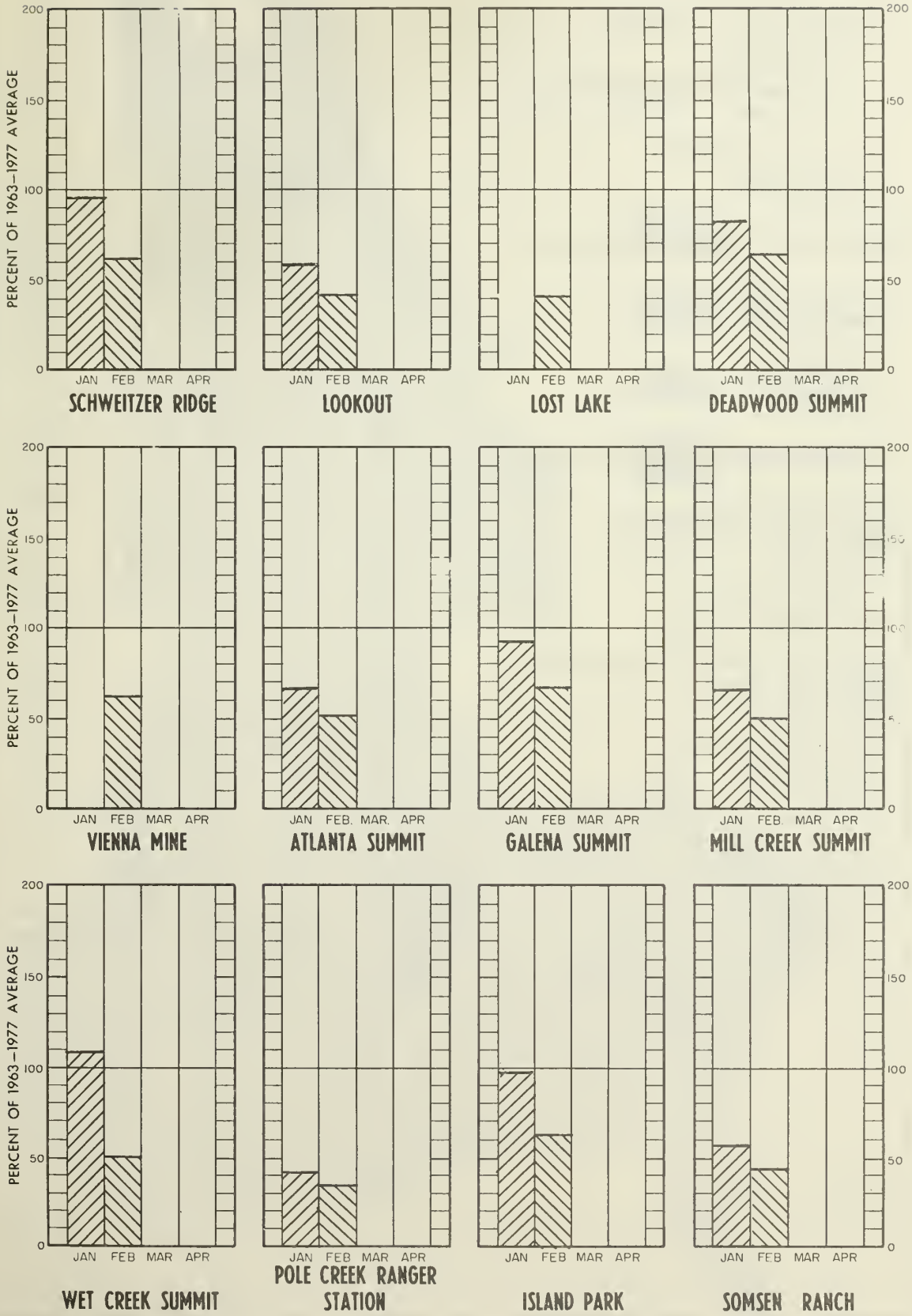
DRAINAGE DIVISIONS	Winter January 1981		Fall - Winter Oct. 1980 - Jan. 1981	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	1.45	- 2.03	11.47	- .33
Flathead	0.90	- 1.95	7.56	- 1.65
Clark Fork	0.29	- 1.90	5.01	- 1.79
Pend Oreille-Spokane	1.11	- 3.31	11.30	- 3.24
Upper Snake	1.33	- 1.30	5.47	- 2.67
Snake River Plain	0.73	- 0.50	3.03	- 1.03
Salmon-Payette-Boise	1.40	- 1.90	8.36	- 1.29
Clearwater	1.52	- 3.22	10.42	- 4.46
Owyhee-Malheur	0.96	- 0.52	3.53	- 1.18

1/ Preliminary analysis and data by the National Weather Service and Meteorlogical Service of Canada.

2/ Departure from 15-year (1963-1977) drainage division average.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 — 1977 15 Year Average

FEBRUARY 1, 1981



COMPARISON of SNOW COVER

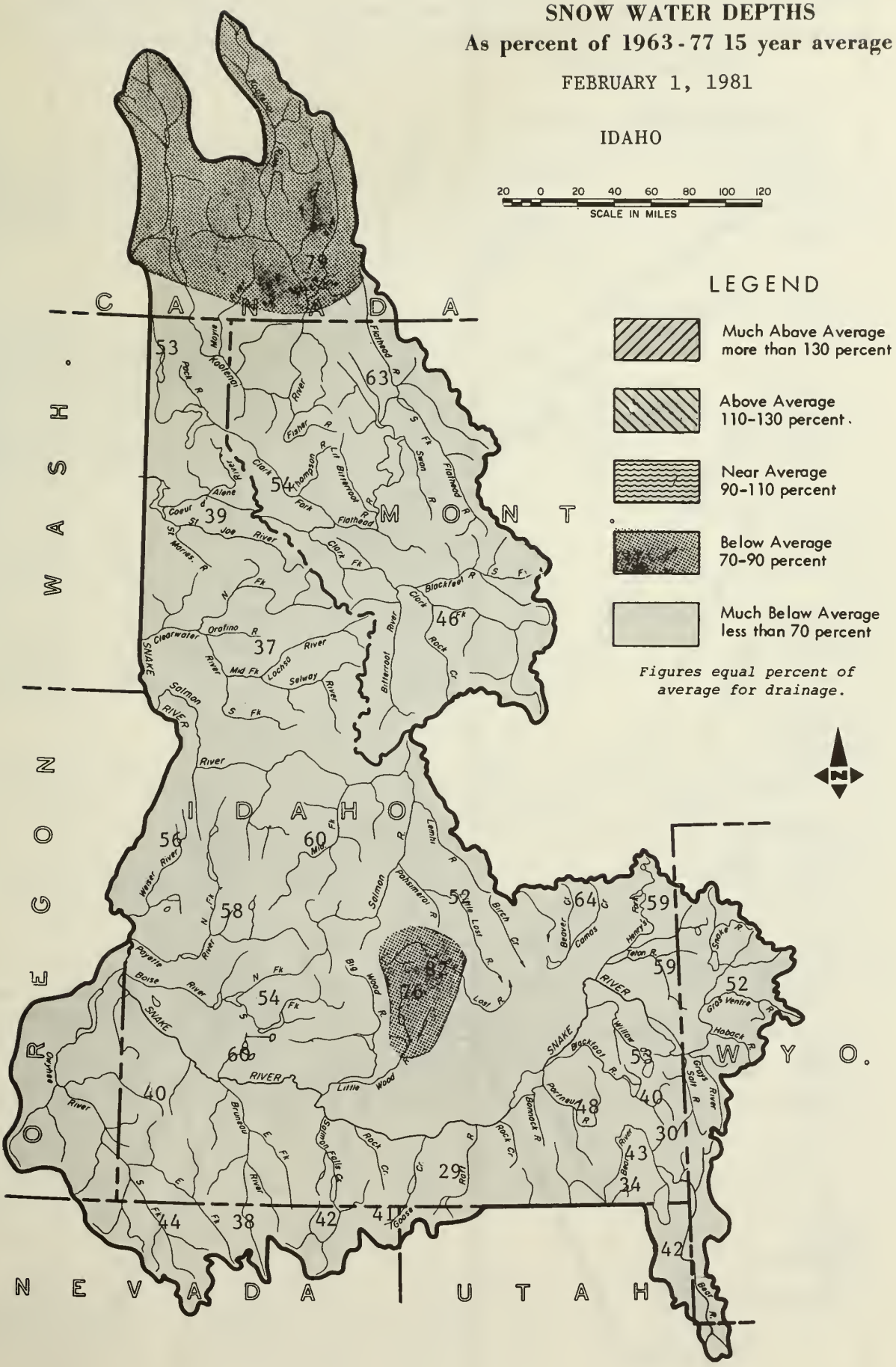
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	23	90	79
Pend Oreille River	70	73	54
Clark Fork River	34	69	46
Flathead River	20	84	63
Priest River	3 - 4	48	53
Spokane River	6	50	39
LOWER SNAKE RIVER BASIN			
Clearwater River	12 - 14	52	37
Salmon River	13	66	60
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	2 - 5	61	52
Big Lost River	4	82	82
Little Wood River	4	72	76
Big Wood River	10	68	69
Boise River	13 - 14	54	54
Canyon Creek	2	-	60
Payette River	12	63	58
Weiser River	1	-	56
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	1	30	29
Goose-Trapper Creek	3	39	41
Salmon Falls Creek	4	39	42
Bruneau River	4	37	38
Owyhee River	6	43	44
Jordan Creek	1	37	40
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Reservoir	32	62	52
Camas-Beaver Creeks	2	106	64
Henrys Fork River	7	73	59
Teton River	8	71	59
Willow Creek	5 - 9	55	53
Blackfoot River	3	34	40
Portneuf River	4	41	48
GREAT BASIN			
Bear River - Upper	5	36	42
Bear River - Lower	13	32	35
Montpelier Creek	6	28	30
Mink Creek	2	45	43
Cub River	3	33	34

SNOW WATER DEPTHS

As percent of 1963-77 15 year average

FEBRUARY 1, 1981

IDAHO



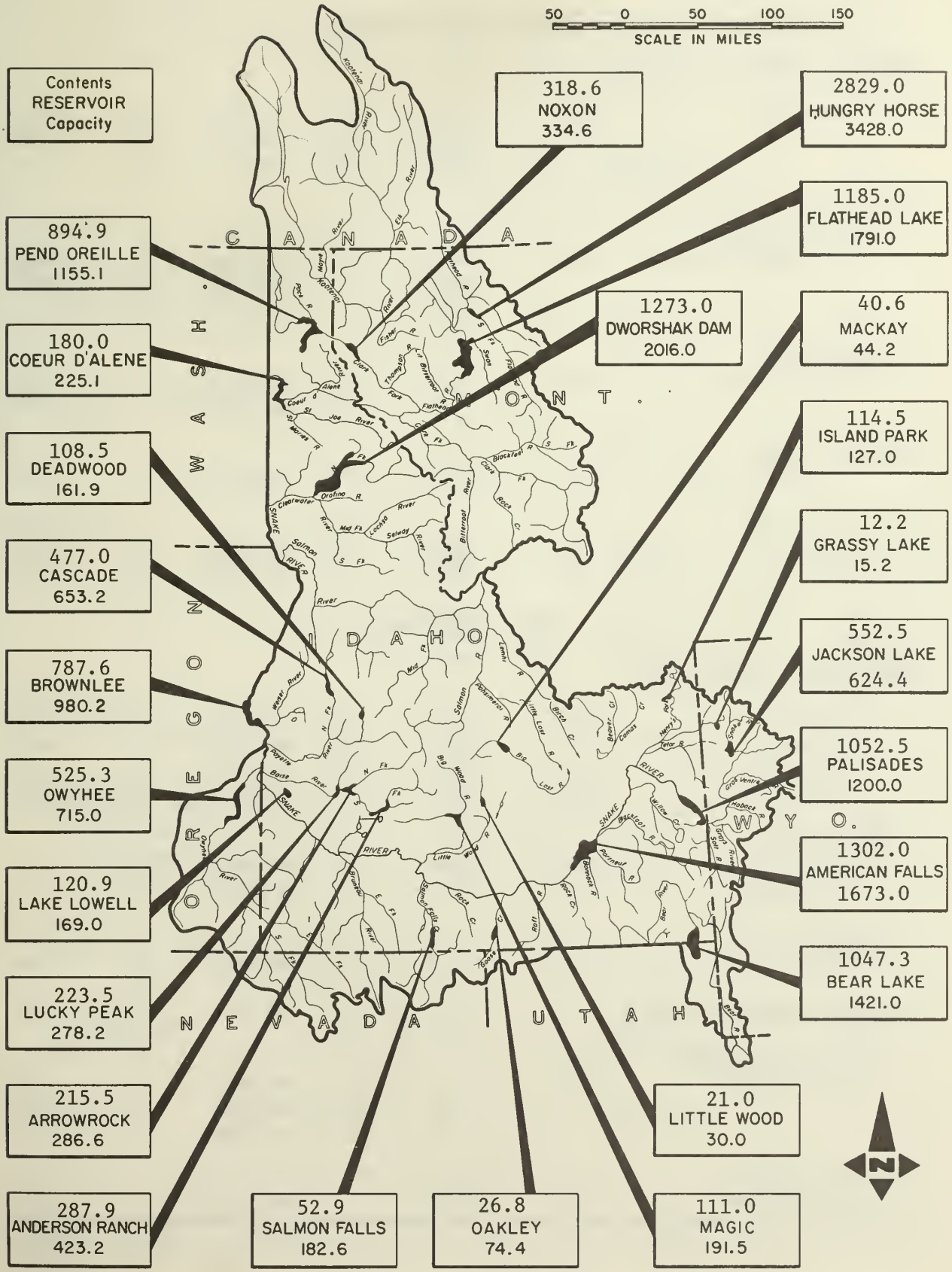
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2829.0	2390.0	2341.0
Flathead	1791.0	1185.0	791.0	1253.3
Pend Oreille	1155.1	894.9	148.9	320.9
Noxon	334.6	318.6	292.3	315.2
Spokane				
Coeur d'Alene	225.1	180.0	54.9	145.3
SNAKE BASIN				
Snake				
Jackson Lake	624.4	552.5	532.6	612.5
Palisades	1200.0	1052.5	847.7	907.8
American Falls	1673.0	1302.0	1041.3	1151.2
Island Park	127.0	114.5	87.2	105.0
Grassy Lake	15.2	12.2	11.2	10.4
Brownlee	980.2	787.6	581.6	674.4
Goose-Trapper Creeks				
Oakley	74.4	26.8	31.3	26.4
Salmon Falls Creek				
Salmon Falls	182.6	52.9	39.7	51.6
Big Lost				
Mackay	44.2	40.6	22.7	30.3
Big Wood				
Magic	191.5	111.0	18.7	103.6
Little Wood				
Little Wood	30.0	21.0	12.6	16.1
Fish Creek				
Carey Valley	14.4	6.3	2.0	--
Boise				
Anderson Ranch	423.2	287.9	209.9	279.0
Arrowrock	286.6	215.5	220.2	254.3
Lucky Peak	278.2	223.5	31.9	85.9
Lake Lowell (Deer Flat)	169.0	120.9	86.5	122.1
Owyhee				
Owyhee	715.0	525.3	540.6	462.5
Payette				
Cascade	653.2	477.0	247.9	370.8
Deadwood	161.9	108.5	55.1	80.6
Weiser				
Mann Creek	11.1	5.9	3.5	--
Clearwater				
Dworshak	2016.0	1273.0	758.9	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1047.3	973.4	1026.4

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

FEBRUARY 1, 1981



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	7280	82	Apr-Sep	--	8858
		6340	82	Apr-Jul	--	7708
		5040	82	Apr-Jun	--	6114
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	9740	71	Apr-Sep	--	13781
		8850	71	Apr-Jul	--	12519
		7500	71	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	720	80	Apr-Sep	--	895
		673	80	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	1500	52	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	680	52	Apr-Sep	--	1309
		650	53	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	655	72	Apr-Sep	--	903
Palisades Inflow 3/		2825	73	Apr-Sep	--	3863
Heise 4/	(nr)	3100	73	Apr-Sep	--	4247
Blackfoot 5/	(nr)	3390	74	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	550	75	Apr-Sep	--	737
Rexburg 7/	(nr)	1150	75	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	68	63	Mar-Sep	--	108
Oakley Reservoir Inflow		13	36	Mar-Sep	--	36
Salmon Falls Creek						
San Jacinto	(nr)	40	42	Mar-Sep	--	95
		38	42	Mar-Jul	--	90
		36	42	Mar-Jun	--	85
Bruneau River						
Hot Springs	(nr)	105	42	Mar-Sep	--	251

(c) Assuming normal meteorological conditions.

† 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
Little Lost River						
Howe	(nr)	27	60	Apr-Sep	--	45
Wet Creek	(bl)	16	62	Apr-Jun	--	26
		25	61	Apr-Sep	--	41
Big Lost River						
Howell Ranch	(at)	195	87	Apr-Sep	--	225
		135	88	Apr-Jun	--	154
Mackay 8/	(nr)	175	86	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		220	69	Apr-Sep	--	319
Inflow 9/		210	69	Apr-Jul	--	303
		230	69	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	77	72	Apr-Sep	--	107
		71	72	Apr-Jul	--	99
		62	72	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	530	72	Apr-Sep	--	733
		485	72	Apr-Jul	--	676
Boise 10/	(nr)	1140	69	Apr-Sep	--	1656
		940	69	Apr-Jun	--	1360
		1060	69	Apr-Jul	--	1536
South Fork						
Anderson Dam 11/	(at)	440	71	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev. 12/	(nr)	12	52	Apr-Jul	--	23
Owyhee, Nev. 12/	(nr)	40	50	Apr-Jul	--	80
Lake Owyhee		235	60	Apr-Sep	387	392
Net inflow 13/		336	58	Feb-Jul	521	578
Payette River						
Horseshoe Bend 14/	(nr)	1330	72	Apr-Sep	--	1860
North Fork						
Cascade 15/	(at)	407	72	Apr-Sep	--	564
Banks 15/	(nr)	520	72	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	355	64	Mar-Sep	--	558

(c) *Assuming normal meteorological conditions.*

+ 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [+]
Salmon River						
Whitebird	(at)	5755	80	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	5900	68	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	186	56	Apr-Sep	--	332
Montpelier Creek						
Montpeleir	(nr)	5.6	45	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	24	48	Apr-Sep	--	50
		22.5	48	Apr-Jul	--	47

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake.
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wildhorse Reservoir.
13/ From WPRS records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.
Cooperative forecasts released by Soil Conservation Service and National Weather Service.

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Above Burke		4100	1/30	16	4.8	10.4	16.4*
Aspen Grove		6500	1/28	23	5.2	11.0	8.4*
Atlanta Summit		7600	2/2	46	13.0	24.4	25.2
Atlanta Townsite		5280	1/29	16	4.9	--	--
Austin Brothers Ranch		6400	1/27	13	2.3	8.6	6.4
Bad Bear		4940	1/30	21	5.0	11.1	11.0
Banner Summit		7040	1/29	50	13.4	--	--
Battle Creek (A)		5710	2/2	T	T	--	2.8
Bear Basin		5350	1/29	38	9.0	11.5	--
Bear Canyon		7900	2/2	40	10.8	13.3	13.0*
Bear Creek (A)	Nevada	8040	2/3	25	5.3	14.0	13.6
Beaverdam Creek		6120	1/31	20	2.8	--	--
Bennett Mountain		6560	2/1	27	6.6	--	12.5*
Benton Meadow		2370	1/30	0	0.0	3.9	5.5
Benton Spring		4920	1/30	16	5.5	10.9	13.9
Big Creek Summit		6580	1/30	54	15.5	27.4	26.3
Big Springs		6400	1/30	34	8.0	10.3	14.7
Birch Creek		6800	1/28	16	3.4	6.8	7.4*
Blue Ridge		6780	1/29	29	6.5	12.8	--
Bogus Basin		6340	2/3	29	8.0	15.8	17.6
Bogus Basin Road		5540	2/3	9	1.6	4.3	6.0
Bone		6200	1/29	12	2.5	5.1	6.0*
Boulder Creek		5440	1/30	38	10.1	11.1	18.0
Breezy Saddle		5010	1/28	28	7.2	13.3	--
Brockman Station		6430	1/29	19	3.9	7.2	--
Brundage Mountain		7560	1/29	64	17.0	29.5	32.2*
Bull Basin (A)		5480	2/2	3	0.4	--	1.3
Camp Creek		6580	1/29	21	5.0	4.0	8.3
Cayuse Airstrip		3500	1/28	7	1.0	3.5	9.7*
Copper Basin		7640	2/2	21	5.9	6.0	6.8
Couch Summit		6840	2/1	43	10.5	15.1	13.7*
Cozy Cove		5380	1/29	33	7.2	11.6	13.2*
Crater Meadows		5960	1/28	40	10.4	21.6	31.0*
Crawford Ranger Station		4860	1/31	14	3.4	6.5	6.7
Crooked Fork		3610	1/29	9	2.4	6.1	10.4*
Cub River Ranger Station		5450	1/26	12	2.8	6.2	6.4
Darby Canyon	Wyoming	8250	1/27	38	7.0	14.0	15.4*
Deadline		6900	1/30	31	7.3	18.0	15.7
Deadwood Airstrip		5360	1/29	33	7.9	11.8	11.7
Deadwood Summit		6860	1/29	75	22.4	32.6	34.8*
Dempsey Creek		6100	2/2	24	4.6	10.2	8.3
Dollarhide Summit		8420	2/2	42	11.2	19.1	18.3*
East Creek		7000	1/31	24	3.6	--	--
Elk Butte		5550	1/28	32	7.7	--	--
Emigrant Summit		7390	2/2	39	7.1	16.6	17.0
Emigration Canyon		6500	2/2	21	3.8	9.2	7.5
Fairview Guard Station		6750	2/2	11	2.0	--	3.7
Fish Lake Airstrip		5650	1/28	35	9.4	21.0	28.8*
Forty-nine Meadows		4830	1/28	26	6.4	12.3	--
Fourth of July Summit		3200	1/29	3	0.2	4.2	7.2
Franklin Basin		8040	1/26	20	5.2	18.1	17.8*
Freds Mountain	Wyoming	8150	2/2	45	9.9	13.0	13.9*
Galena		7440	1/28	42	10.2	11.9	14.8
Galena Summit		8780	1/28	44	11.8	15.3	17.5
Garfield Ranger Station		6560	1/30	30	6.4	8.5	8.0*
Gibbons Pass	Montana	7100	2/1	37	11.2	12.4	16.7
Giveout		6860	1/28	18	2.7	9.6	8.5
Goat Creek	Nevada	8880	1/28	21	4.0	12.3	11.8
Graham Guard Station		5690	1/29	26	5.4	10.9	--
Graham Ranch		6270	1/28	37	8.4	10.1	10.5
Grassy Lake	Wyoming	7265	1/28	58	13.6	16.3	24.8
(Hell Creek) Lava Creek		7350	1/28	27	5.9	9.3	--
Hemlock Butte		5810	1/28	41	10.9	22.7	35.1*
Hilts Creek		8000	1/29	22	5.4	8.4	--
Hoodoo Basin	Montana	6000	2/1	57	20.4	30.0	36.3*
Hoodoo Creek	Montana	5900	2/1	47	16.6	23.7	32.5*
Howell Canyon		7980	1/28	21	5.4	17.8	18.6
Hyndman Creek		7440	2/2	38	9.3	--	--
Island Park		6290	1/30	33	7.6	9.0	12.0
Jackpine Creek	Wyoming	7350	1/27	32	6.2	11.3	14.9*
Jackson Peak		7070	1/29	46	13.5	22.4	24.1*
Johnson Creek		6730	1/27	20	4.1	--	--
Kilgore		6320	1/28	25	5.8	6.2	8.6

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Lake Fork		5290	2/1	26	6.5	9.0	11.2*
Little Beaver		6970	1/28	15	2.3	10.7	10.6
Little Camas Flat		4940	2/1	14	4.0	--	5.2*
Lolo Pass		5240	1/29	27	7.7	17.4	21.8*
Lookout		5140	1/30	32	10.8	20.0	25.4
Lost Garfield		6600	2/2	10	1.7	--	3.1
Lost Lake		6110	1/28	56	16.3	25.8	39.4
Lost Wood Divide		7900	2/2	43	12.1	16.5	17.0*
Lower Home Canyon		7640	1/29	17	3.1	10.9	10.1*
Lower Pebble		5780	2/1	18	3.1	11.2	9.2*
Magic Mountain		6880	1/30	29	6.8	14.6	12.8
Mascot Mine		7780	2/2	33	8.2	11.5	9.8*
McRenolds Reservoir		6720	1/27	34	6.5	9.9	13.0*
Mill Creek Summit		8800	1/28	32	8.6	17.0	17.1
Mink Creek		6410	2/1	36	7.0	12.3	12.4*
Montpelier Creek		6540	1/28	10	1.9	6.6	5.8
Moonshine		7440	2/2	20	4.2	--	7.9*
Moores Creek Summit		6100	1/30	45	12.5	22.8	23.7
Moose Creek		6200	1/30	26	6.6	7.4	12.6
Morgan Creek		7600	1/28	20	4.5	8.6	10.3
Mosquito Ridge		5200	1/30	47	15.2	--	24.5*
Mount Baldy		8920	1/30	49	11.3	15.6	15.2*
Mud Creek		7100	1/29	41	9.0	13.7	--
Muldoon		6320	1/30	24	4.5	7.1	6.2*
Packsaddle Spring		8200	1/27	37	9.0	--	--
Pebble Creek		6550	2/1	24	5.2	14.5	11.2
Phillips Bench	Wyoming	8200	1/29	41	15.3	15.8	17.8*
Pierce Ranger Station		3080	1/30	4	0.7	7.6	8.6
Pine Creek Pass		6810	2/2	32	6.8	8.6	12.0
Pole Creek Ranger Station		8360	1/29	24	5.0	14.0	14.4
Prairie		4800	1/29	3	0.6	4.6	5.5
Rammell Mountain		8240	1/27	54	11.7	--	--
Red Canyon (A)		6520	2/2	6	1.2	--	5.8
Rock Flat Summit		5310	1/29	35	7.8	9.4	13.3
Savage Pass		6170	1/29	31	10.0	16.2	19.1*
Sawmill Canyon		7000	2/2	18	3.0	--	6.0*
Sawtell Mountain		8720	1/29	54	15.1	22.7	22.8*
Schweitzer Bowl		4800		Plowed out		18.5	21.8*
Schweitzer Ridge		6200	1/27	49	20.1	38.4	32.6*
Secesh Summit		6520	2/1	50	16.4	24.2	26.3*
Seventy-six Creek	Nevada	7100	2/3	18	3.8	8.8	7.8
Shanghai Summit		4570	1/28	12	1.4	10.4	17.4*
Sheep Mountain		6570	1/29	23	4.7	8.7	9.8*
Sherwin		3200	1/30	4	0.7	5.9	10.7
Slug Creek Divide		7230	1/29	21	4.3	13.2	11.5
Soldier Ranger Station		5740	2/1	24	6.1	10.8	9.8
Somsen Ranch		6840	1/27	23	4.4	11.0	10.1
South Mountain		6500	1/31	17	4.0	10.8	9.9
Squaw Flat		6240	1/31	42	10.6	--	--
Squaw Meadow		5900	2/1	50	16.9	25.5	25.8*
State Line		6660	2/2	30	6.5	8.8	10.0
Stickney Mill		7430	2/2	26	6.3	7.2	6.0*
Strawberry Creek		5820	2/2	21	3.4	6.7	7.4
Succor Creek		6200	2/2	14	2.8	--	3.8
Sulphur Peak		7070	1/27	19	4.0	--	--
Sunset		5540	1/29	33	8.9	--	--
Swede Peak		7640	1/30	41	8.5	13.1	12.6
Targhee Pass		6980	1/29	22	4.9	6.3	10.5*
Teton Pass W.S.	Wyoming	7740	1/29	39	8.8	12.4	16.8*
Tex Creek		6650	1/28	20	4.3	7.7	6.5*
Trinity Mountain		7770	2/2	54	16.0	30.6	31.1
Upper Home Canyon		8560	1/29	25	5.2	17.7	16.3*
Valley View		6680	1/29	25	5.6	8.6	12.5
Vaught Ranch (A)		5830	2/2	T	T	--	3.2*
Vienna Mine		8960	2/2	56	16.2	29.8	26.1*
War Eagle (A)		7280	2/2	35	8.8	--	16.3*
West Branch		5560	1/30	43	11.6	--	--
Wet Creek Summit		7680	1/29	21	4.4	7.6	8.7*
Whiskey Flat		6960	1/28	9	2.3	7.9	6.5
White Elephant		7710	1/29	42	10.5	16.8	13.2*
Willow Flat		6070	1/26	14	3.8	11.6	10.9
Wood Canyon Divide		7450	1/27	18	3.9	--	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
ESCS Crop Reporting Service
SEA Agricultural Research

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Water and Power Resources Service
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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Cooperating with

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IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
MAR. 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utoh 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG

ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.

STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR MARCH 1, 1981

Snow surveys near March 1 indicate an extremely variable snowpack in Idaho with all areas reporting below to well below normal conditions. Many watersheds, particularly the small, low elevation drainages, have a critical shortage of snow. Snow water accumulation varies from a low of 12 percent of normal on the Palouse River watershed to a high of 79 percent of average on the Little Wood drainage.

Valley precipitation was below normal during February throughout southern Idaho and above average in some northern areas. Total valley precipitation for the period of November 1, 1980 to March 1, 1981 is below normal throughout the state.

Forecasts of seasonal runoff are below to well below normal throughout the state with some volume forecasts near or at a record low. Forecasts vary from a low of 37 percent of average for Salmon Falls Creek to 76 percent for the Henry's fork and Big Lost Rivers.

Reservoir storage is good to excellent and most major reservoirs are expected to fill. Combined storage in sixteen irrigation reservoirs in the Snake River Basin is presently 84 percent of capacity which is 120 percent of normal for March 1.

The outlook is for adequate irrigation water supplies for areas with storage facilities and below normal supplies in other areas. Serious to critical shortages are the prospect on many streams with no reservoirs.

With water shortages apparent for the coming season, all water users should take all steps possible to efficiently manage and conserve the water resource.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

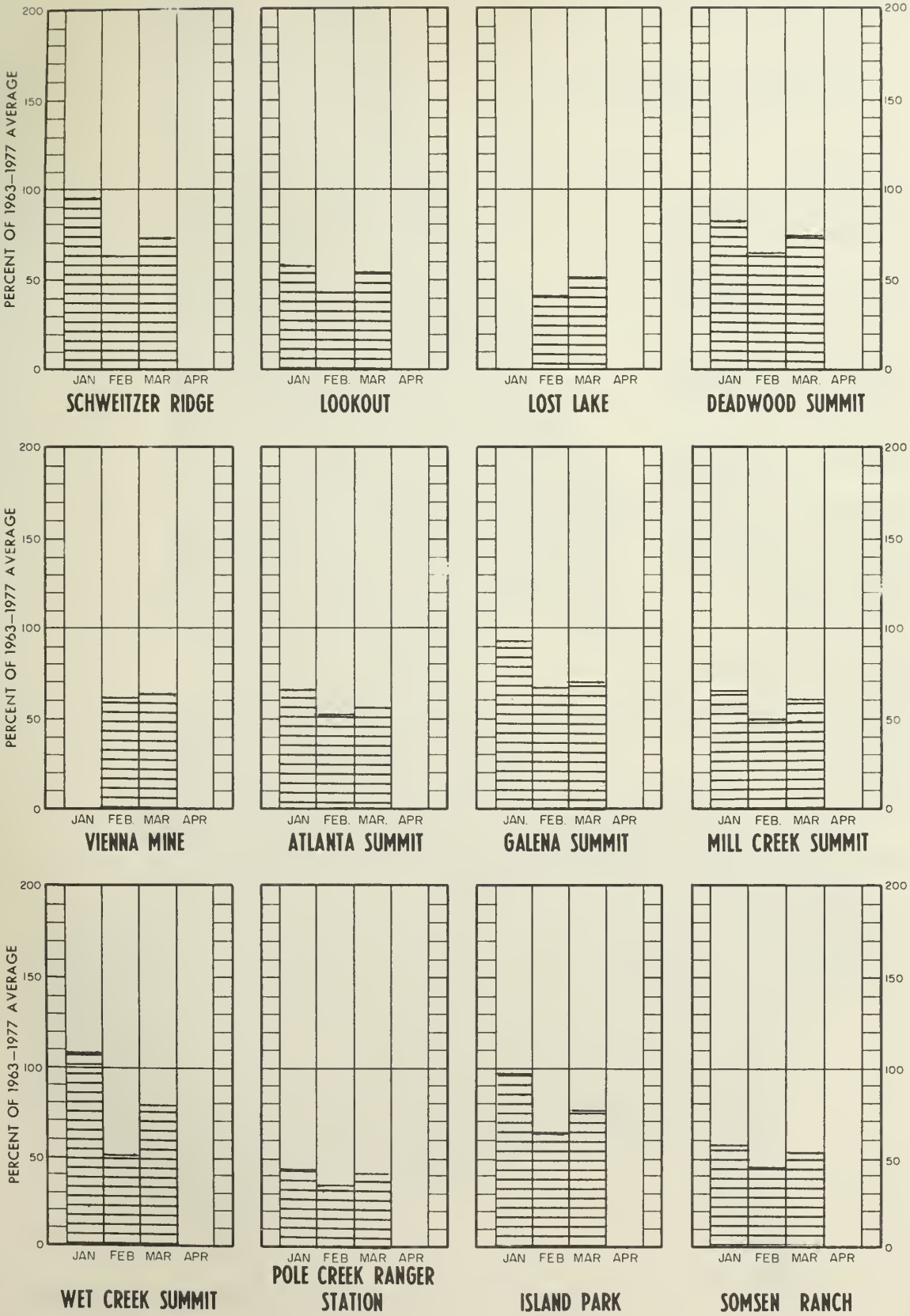
DRAINAGE DIVISIONS	Winter February 1980		Fall - Winter Nov. 80 - Feb. 81	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	2.29	+ 0.34	12.24	+ 0.59
Flathead	1.82	+ 0.08	8.50	- 0.70
Clark Fork	1.52	+ 0.25	5.56	- 1.22
Pend Oreille-Spokane	3.15	+ 0.31	13.67	- 1.35
Upper Snake	1.23	- 0.62	5.93	- 2.66
Snake River Plain	0.44	- 0.34	2.89	- 1.41
Salmon-Payette-Boise	2.12	+ 0.37	9.46	- 0.60
Clearwater	3.11	+ 0.24	12.80	- 2.12
Owyhee-Malheur	0.90	+ 0.05	3.72	- 1.10

1/ Preliminary analysis and data by the National Weather Service and Meteorlogical Service of Canada.

2/ Departure from 15-year (1963-77) drainage division average.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

MARCH 1, 1981



COMPARISON of SNOW COVER

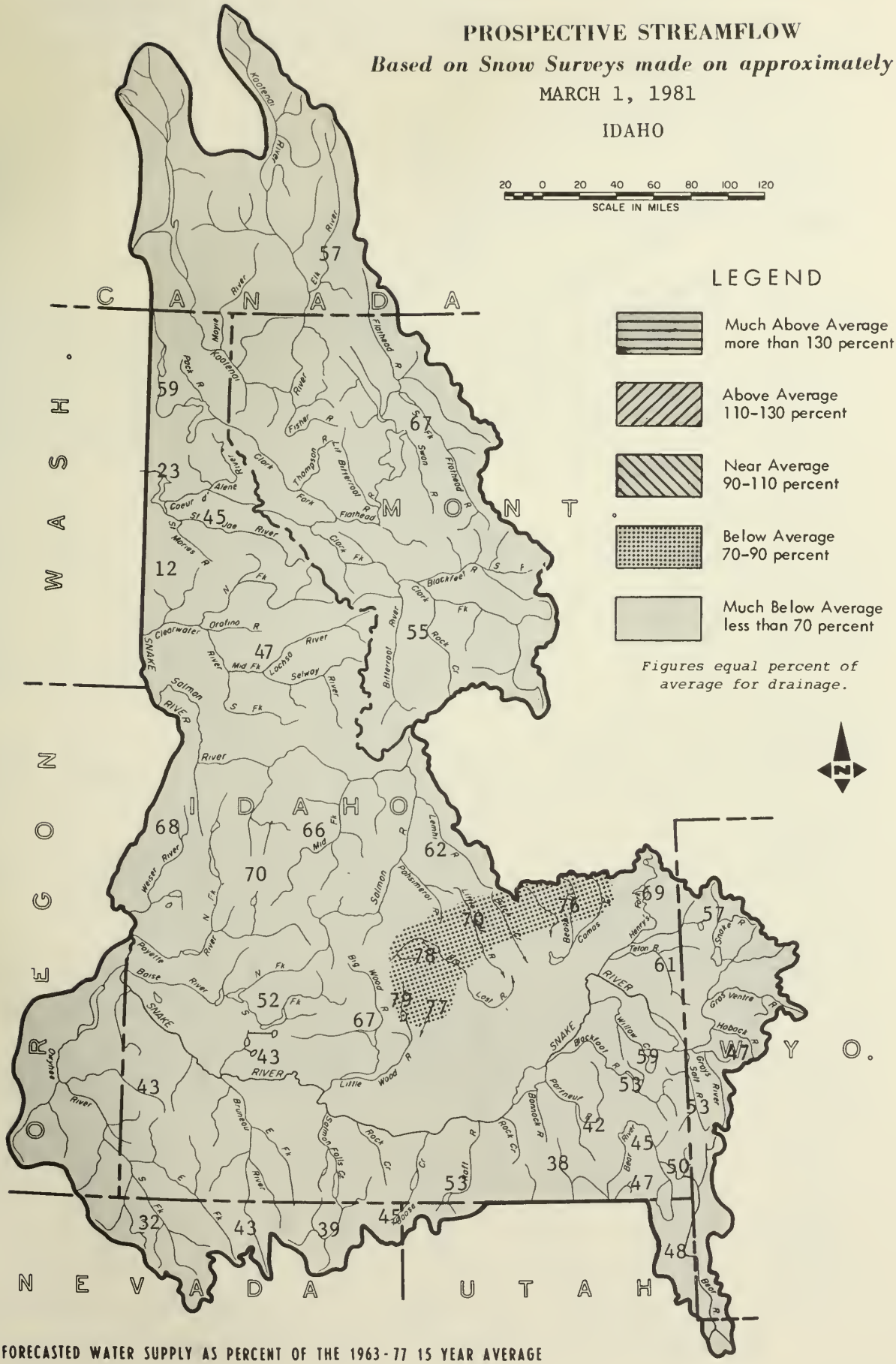
RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF : LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	19	82	57
Pend Oreille River	106	87	60
Clark Fork River	69	79	55
Flathead River	37	97	67
Priest River	3	63	59
Spokane River	12	74	45
Hayden Creek	2 - 6	38	23
LOWER SNAKE RIVER BASIN			
Palouse River	3	26	12
Clearwater River	15 - 17	72	47
Salmon River	26 - 31	70	66
Lemhi River	6	61	62
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	5 - 6	72	70
Big Lost River	9	76	78
Fish Creek	2	67	77
Little Wood River	4	72	79
Big Wood River	11 - 13	65	67
Boise River	17 - 18	52	52
Canyon Creek	3	44	43
Payette River	14 - 17	70	70
Weiser River	3 - 5	79	68
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	5 - 7	52	53
Goose-Trapper Creek	4 - 6	43	45
Salmon Falls Creek	10	35	39
Bruneau River	5	40	43
Owyhee River	6	27	32
Jordan Creek	3	35	43
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Reservoir	34	62	54
Camas-Beaver Creeks	1	113	69
Henrys Fork River	7 - 11	79	69
Teton River	7	74	61
Willow Creek	5 - 8	60	59
Blackfoot River	3 - 6	44	53
Portneuf River	4 - 10	44	42
GREAT BASIN			
Bear River - Upper	4	42	48
Bear River - Lower	14	41	45
Montpelier Creek	6	47	50
Mink Creek	7	40	45
Cub River	3 - 4	43	47
Malad River	4 - 6	32	38

PROSPECTIVE STREAMFLOW

Based on Snow Surveys made on approximately

MARCH 1, 1981

IDAHO



FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

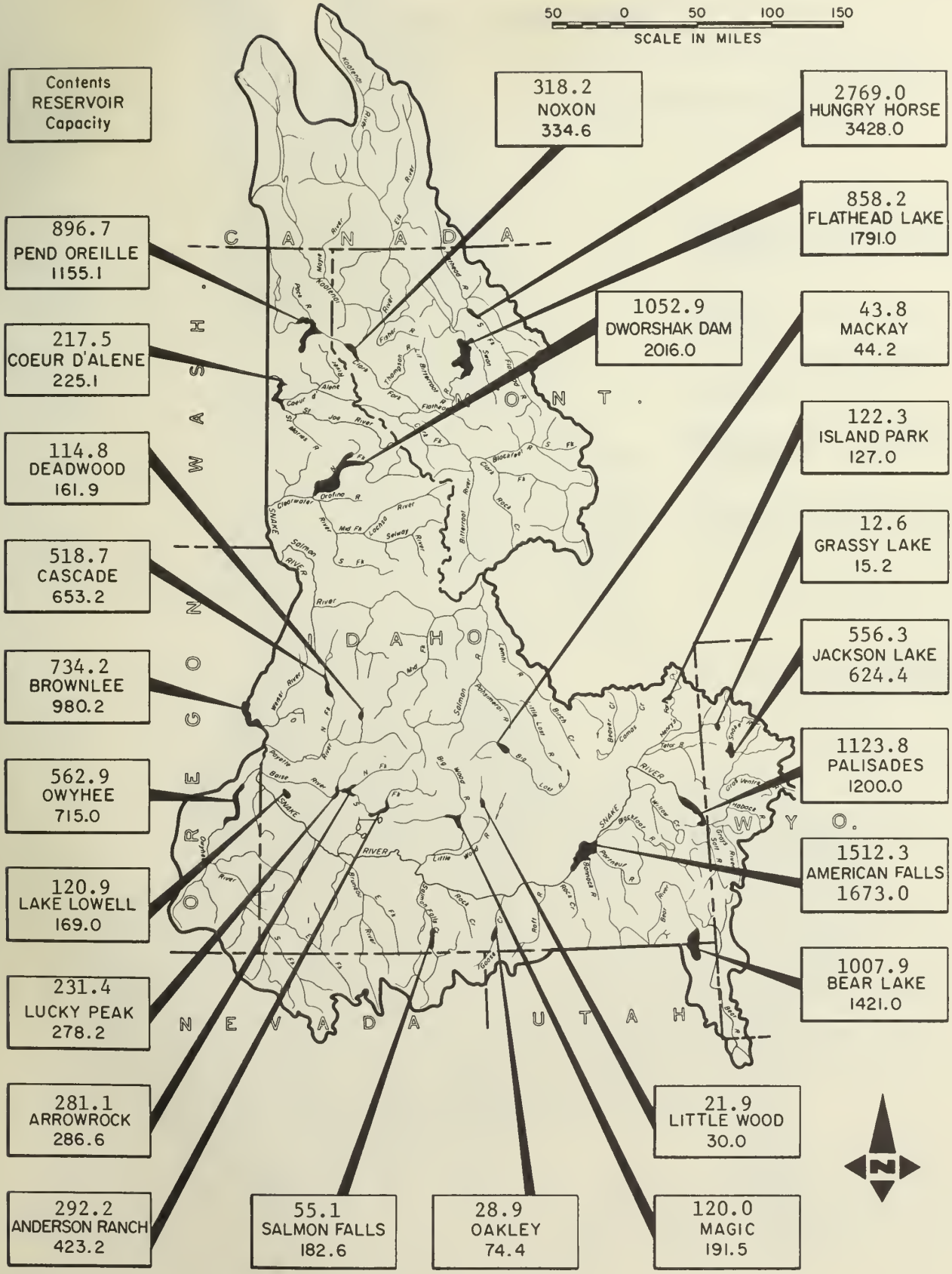
RESERVOIR STORAGE (1.000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2769.0	2430.0	2200.0
Flathead	1791.0	858.2	636.2	994.6
Pend Oreille	1155.1	896.7	155.0	376.0
Noxon	334.6	318.2	264.4	299.1
Spokane				
Coeur d'Alene	225.1	217.5	70.5	121.6
SNAKE BASIN				
Snake				
Jackson Lake	624.4	556.3	547.8	615.6
Palisades	1200.0	1123.8	909.3	903.6
American Falls	1673.0	1512.3	1364.0	1241.9
Island Park	127.0	122.3	103.4	114.6
Grassy Lake	15.2	12.6	11.5	10.6
Brownlee	980.2	734.2	630.4	465.2
Goose-Trapper Creeks				
Oakley	74.4	28.9	40.1	29.3
Salmon Falls Creek				
Salmon Falls	182.6	55.1	48.1	55.5
Big Lost				
Mackay	44.2	43.8	26.2	32.4
Big Wood				
Magic	191.5	120.0	29.0	113.9
Little Wood				
Little Wood	30.0	21.9	15.9	17.8
Fish Creek				
Carey Valley	14.4	8.4	3.0	--
Boise				
Anderson Ranch	423.2	292.2	213.3	256.5
Arrowrock	286.6	281.1	279.7	251.4
Lucky Peak	278.2	231.4	47.0	87.1
Lake Lowell (Deer Flat)	169.0	120.9	90.8	132.6
Owyhee				
Owyhee	715.0	562.9	629.9	491.3
Payette				
Cascade	653.2	518.7	279.5	338.8
Deadwood	161.9	114.8	59.9	85.9
Weiser				
Mann Creek	11.1	9.3	8.0	--
Clearwater				
Dworshak	2016.0	1510.5	805.6	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1052.9	1007.9	1030.6

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

MARCH 1, 1981

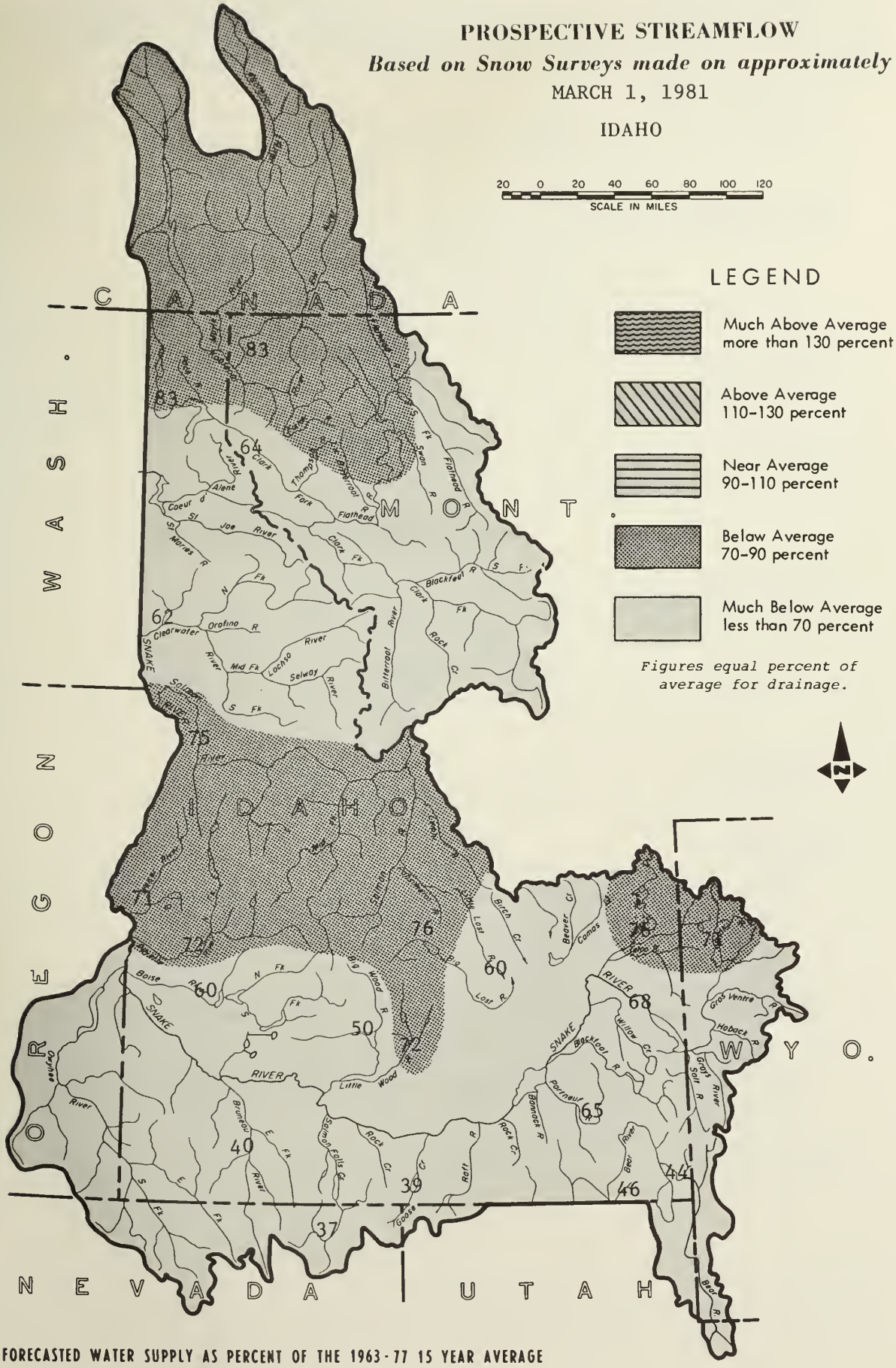


STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	7400	83	Apr-Sep	--	8858
		6440	83	Apr-Jul	--	7708
		5040	82	Apr-Jun	--	6144
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	8870	64	Apr-Sep	--	13781
		8060	64	Apr-Jul	--	12519
		6800	64	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	694	83	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	1500	52	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	680	52	Apr-Sep	--	1309
		650	53	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	644	71	Apr-Sep	--	903
Palisades Inflow 3/		2620	68	Apr-Sep	--	3863
Heise 4/	(nr)	2900	68	Apr-Sep	--	4247
Blackfoot 5/	(nr)	3200	70	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	560	76	Apr-Sep	--	737
Rexburg 7/	(nr)	1165	76	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	70	65	Mar-Sep	--	108
Oakley Reservoir Inflow		14	39	Mar-Sep	--	36
Salmon Falls Creek						
San Jacinto	(nr)	35	37	Mar-Sep	--	95
		33	37	Mar-Jul	--	90
		31	37	Mar-Jun	--	85
Bruneau River						
Hot Springs	(nr)	100	40	Mar-Sep	--	251

(c) Assuming normal meteorological conditions.

† 1963-1977 period.



FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	THIS YEAR FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
Little Lost River						
Howe	(nr)	27	60	Apr-Sep	--	45
Wet Creek	(bl)	16	62	Apr-Jun	--	26
		25	61	Apr-Sep	--	41
Big Lost River						
Howell	(at)	170	76	Apr-Sep	--	225
		115	75	Apr-Jun	--	154
Mackay 8/	(nr)	150	74	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		160	50	Apr-Sep	--	319
Inflow 9/		167	50	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	77	72	Apr-Sep	--	107
		71	72	Apr-Jul	--	99
		62	72	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	460	63	Apr-Sep	--	733
		425	63	Apr-Jul	--	676
Boise 10/	(nr)	1000	60	Apr-Sep	--	1656
		940	60	Apr-Jul	--	1536
		820	60	Apr-Jun	--	1360
South Fork						
Anderson Dam 11/	(at)	380	61	Apr-Sep	--	622
Owyhee River						
Gold Cr., Nev. 12/	(nr)	7	32	Apr-Jul	--	23
Owyhee, Nev 12/	(nr)	28	35	Apr-Jul	--	80
Lake Owyhee		97	25	Apr-Sep	387	392
net inflow 13/		181	35	Mar-Jul	432	510
Payette River						
Horseshoe Bend 14/	(nr)	1330	72	Apr-Sep	--	1860
North Fork						
Cascade 15/	(at)	405	72	Apr-Sep	--	564
Banks 15/	(nr)	520	72	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	316	71	Apr-Sep	--	442
		399	72	Mar-Sep	--	558

(c) *Assuming normal meteorological conditions.*

+ 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
Salmon River						
Whitebird	(at)	5400	75	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	5350	62	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	147	44	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	6	48	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	23	46	Apr-Sep	--	50.0
		22	47	Apr-Jul	--	47.0

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake.
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wildhorse Reservoir.
13/ From WPRS records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.
Cooperative forecasts released by Soil Conservation Service and National Weather Service.

(c) *Assuming normal meteorological conditions.*

+ 1963-1977 period.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Above Burke		4100	2/27	24	9.0	12.0	22.9*
Above Gilmore		8240	2/27	25	5.7	7.6	8.2
Antelope Ridge		6180	2/28	0	0.0	6.0	6.9*
Aspen Grove		6500	3/2	28	8.0	13.1	10.7*
Aspen Hall Pass (A)		8200	2/27	29	6.4	10.4	8.5*
Atlanta Summit		7600	2/26	56	17.8	29.9	31.2*
Atlanta Townsite		5280	2/25	17	5.6	--	--
Austin Bros. Ranch		6400	2/24	13	4.4	9.4	8.3
Bad Bear		4940	2/26	20	6.5	11.8	13.5
Badger Gulch		6660	2/26	15	4.7	12.9	10.7
Banner Summit		7040	2/25	61	19.1	26.4	--
Battle Creek (A)		5710	2/27	0	0.0	--	3.2
Bear Basin		5350	2/26	42	11.2	14.8	--
Bear Canyon		7900	2/25	44	13.2	16.8	15.9
Bear Creek	Nevada	8040	2/27	32	7.9	20.0	18.0*
Bear Mountain		5400	2/24	94	37.4	38.1	53.7*
Bear Saddle		6180	2/27	45	16.5	22.0	--
Beaverdam Creek		6120	2/28	15	4.4	8.8	--
Bennett Mountain		6560	3/1	22	6.9	14.4	15.0*
Benton Meadow		2370	2/28	0	0.0	4.8	6.4
Benton Spring		4920	2/28	26	8.8	12.6	17.7
Big Creek Summit		6580	2/27	68	21.0	34.5	31.6
Big Springs		6400	2/27	46	12.1	14.4	18.7
Birch Creek		6800	3/2	17	5.4	--	10.7*
Black Canyon		7960	2/27	72	22.2	--	29.9*
Black Moose		8160	2/27	70	21.8	--	36.1*
Blue Ridge		6780	2/27	31	10.3	18.1	--
Bogus Basin		6340	3/2	29	9.3	22.2	20.7
Bogus Basin Road		5540	3/2	0	0.0	2.3	5.8
Bone		6200	2/27	9	3.4	7.2	7.4*
Borah (A)		8250	2/27	13	3.0	5.0	--
Bostetter Ranger Station		7500	2/26	27	7.9	17.5	17.1
Boulder Creek		5440	2/27	40	13.2	14.0	21.8
Boy Scout Camp		7740	2/26	24	7.7	15.0	12.8
Breezy Saddle		5010	2/27	39	12.0	15.8	--
Brockman Station		6430	2/26	19	5.9	9.3	--
Brundage Mountain		7560	2/26	84	26.0	41.6	40.6*
Bull Basin (A)		5480	2/27	0	0.0	--	1.2
Camas Creek Divide		5710	3/1	14	4.7	10.6	10.0*
Camp Creek		6580	2/27	32	6.8	6.0	9.8
Cayuse Airstrip		3500	2/27	6	1.6	5.1	12.0
Cedar Creek		6820	2/27	11	3.9	8.8	9.3
Chilco Ridge		3650	2/24	0	0.0	2.2	--
Chimney Creek		6400	3/1	26	8.5	15.5	--
Christensen Ranch		5560	2/23	16	5.0	10.1	7.9
Clear Creek Meadows (A)	Utah	9420	2/26	38	13.6	16.8	19.1
(Cliff Canyon) Tom Perry Canyon		7200	2/23	9	3.0	8.2	--
Conie Ridge		3900	2/24	0	0.0	3.1	--
Copes Camp		7520	2/27	17	2.9	7.4	6.6
Copper Basin		7640	2/25	22	6.7	8.5	8.4
Copper Ridge		4820	2/25	21	7.6	11.2	25.1
Corner Creek		3150	2/24	0	0.0	3.3	--
Couch Summit		6840	3/1	39	8.6	19.0	16.9*
Cozy Cove		5380	2/25	36	10.5	14.4	15.2*
Crater Meadows		5960	2/27	57	17.6	27.1	38.9
Crawford Ranger Station		4860	2/27	10	3.5	7.0	7.7
Crooked Fork		3610	2/27	14	4.6	7.5	12.7*
Cub River Ranger Station		5450	2/23	17	4.9	9.1	8.4
(Daniels Creek) Reed Canyon		6270	2/23	12	3.7	7.5	--
Darby Canyon	Wyoming	8250	3/2	41	11.3	16.7	19.8*
Deadline		6900	2/27	28	8.9	18.1	18.8
Deadline South		7450	2/27	33	9.8	25.2	--
Deadman Gulch		5600	2/25	18	5.8	16.2	14.7*
Deadwood Airstrip		5360	2/25	38	11.9	14.1	14.4
Deadwood Summit		6860	2/25	94	30.6	40.9	41.3*
Dempsey Creek		6100	3/2	16	4.3	12.0	11.0
Dollarhide Summit		8420	2/26	48	15.0	22.6	21.1
Double Springs Pass (A)		8400	2/27	21	4.8	9.6	8.7*
Dry Basin		7820	2/23	40	11.6	28.9	24.2*
Dry Creek Flat		6360	2/23	2	0.8	10.6	7.4
Dry Fork		7220	2/26	33	10.6	14.6	14.6*
East Creek		7000	2/28	16	4.1	11.1	--
East Twin		4130	2/27	0	0.0	4.0	10.8

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Elk Butte		5550	2/27	49	14.2	17.5	34.7
Emigrant Summit		7390	2/24	33	8.5	22.8	21.7
Emigration Canyon		6500	2/24	17	5.0	11.3	9.7
Fairview Guard Station		6750	2/27	14	3.2	5.4	4.2
Fish Lake Airstrip		5650	2/27	58	17.3	24.7	36.3
Fishpole Lake		9300	2/25	47	14.7	23.2	17.3*
Forty-nine Meadows		4830	2/27	38	11.9	14.9	27.2
Fourth of July Summit		3200	2/25	0	0.0	2.9	8.9
Fox Creek	Nevada	6750	2/27	11	3.6	10.2	9.7
Franklin Basin		8040	2/23	36	9.9	23.3	22.7
Freds Mountain	Wyoming	8150	3/2	43	12.1	18.0	16.9*
Galena		7440	2/25	44	12.7	16.0	17.0
Galena Summit		8780	2/25	51	14.4	19.0	20.6
Garfield Ranger Station		6560	2/27	23	8.5	11.5	9.8
George Creek		8840	2/26	30	8.7	--	--
Giveout		6860	2/26	24	6.1	12.1	11.1
Gibbons Pass	Montana	7100	2/23	59	16.5	16.6	21.2
Goat Creek	Nevada	8880	2/27	22	5.6	17.5	15.7
Graham Guard Station		5690	2/25	26	7.9	13.5	--
Graham Ranch		6270	2/25	37	9.5	13.5	12.8
Grassy Lake	Wyoming	7265	2/25	60	20.3	24.3	30.6
Hall Creek		7560	2/27	14	2.3	6.9	4.8*
Halverson Creek		4850	2/24	82	35.2	34.0	39.1*
(Hell Creek) Lava Creek		7350	2/26	30	8.0	12.6	--
Hemlock Butte		5810	2/27	61	18.1	27.7	43.6*
Hilts Creek		8000	2/25	31	7.8	10.2	--
Hoodoo Basin	Montana	6000	2/26	87	30.6	37.2	45.4*
Hoodoo Creek	Montana	5900	2/26	79	25.8	34.5	42.0*
Horseshoe Basin		8000	2/23	35	10.9	27.6	22.0*
Howell Canyon		7980	2/26	27	9.0	20.9	22.1
Hummingbird Springs	Nevada	8870	2/27	34	8.9	22.4	19.5
Hyde Pasture (A)		5760	2/27	T	0.1	--	5.3
Hyndman Creek		7440	2/25	38	10.8	14.3	--
Indian Grove		7560	2/26	18	5.2	12.4	--
Indian Meadows	Wyoming	8240	2/25	65	20.5	25.7	30.9*
Iron Bog		7650	2/26	35	10.3	13.4	12.8*
Iron Mine Creek		6300	2/27	26	8.3	11.1	9.9
Irving Creek		7040	2/26	19	4.1	--	5.2*
Island Park		6290	2/27	43	11.6	12.9	15.1
Jackpine Creek	Wyoming	7350	2/25	33	9.9	15.5	19.6*
Jackson Peak		7070	2/25	57	17.6	28.4	27.3
Johnson Creek		6730	2/24	24	5.6	13.6	--
Kellogg Peak (A)		5560	2/25	23	8.9	19.6	28.2*
Kilgore		6320	2/26	27	8.8	8.6	10.6
Kit Carson Pasture		4950	2/27	17	5.1	7.6	--
Lake Fork		5290	2/27	31	8.7	10.9	14.6
Latham Springs		7630	2/27	66	20.0	--	28.6
Leadbelt		6700	2/26	22	7.2	9.8	8.6
Leatherman Pass		9860	2/27	51	14.4	13.7	20.2*
Lemhi Pass	Montana	7480	2/28	20	5.0	6.6	8.1
Lemhi Ridge	Montana	8100	2/28	28	6.2	7.7	8.9*
Liberty Spring		8600	2/23	47	13.7	34.0	32.7
Little Beaver		6970	2/26	28	8.0	13.2	14.0
Little Camas Flat		4940	3/1	7	1.6	5.2	5.9*
Logger Springs		8120	2/26	33	7.6	16.6	--
Lolo Pass		5240	2/27	41	12.9	21.5	27.5
Lookout		5140	2/27	49	16.6	20.6	31.0
Lost Garfield		6600	2/27	13	3.4	4.0	3.7
Lost Lake		6110	2/27	85	25.7	29.9	50.0*
Lost Wood Divide		7900	2/25	47	14.2	20.2	20.4*
Lower Elkhorn		6960	2/23	16	5.5	16.9	12.7*
Lower Home Canyon		7640	2/25	22	6.4	13.1	12.2*
Lower Pebble		5780	2/28	13	3.8	12.6	12.3*
Lower Sands Creek		3120	2/25	12	4.1	8.4	17.5*
Lucky Dog		6860	2/27	56	16.0	--	22.1
Magic Mountain		6880	2/27	28	9.0	17.3	16.4
Mascot Mine		7780	2/25	36	10.5	13.5	13.1
McRenolds Reservoir		6720	2/25	35	10.1	13.8	17.4*
Meadow Lake		9150	2/27	42	10.9	12.6	16.5
Mill Creek Summit		8800	2/26	47	12.4	18.6	20.3
Mink Creek		6410	3/1	31	8.8	18.0	15.5
Montpelier Creek		6540	2/26	12	3.1	8.7	7.5
Moonshine		7440	2/27	25	5.4	8.5	9.3

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
			Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME		Elevation				Last Year	Average
Moores Creek Summit		6100	2/26	48	14.9	29.5	28.6
Moose Creek		6200	2/27	41	12.6	9.6	15.6
Morgan Creek		7600	2/24	29	7.9	10.4	12.8
Moscow Mountain		4410	2/27	12	4.1	8.2	15.6
Mosquito Ridge (A)		5200	2/25	66	23.3	24.1	34.6
Mount Baldy		8920	2/27	48	13.6	18.6	18.4
Mud Creek		7100	2/27	46	13.3	19.2	--
Mud Flat		5730	2/28	4	1.6	6.5	6.0*
Muldoon		6320	2/27	16	5.4	8.2	7.6
Nez Perce Pass	Montana	6570	2/27	30	8.5	10.6	15.7
One Mile Summit		7330	2/26	8	2.5	5.2	6.1
Oxford Mountain		6800	2/23	15	4.3	11.6	9.4
Oxford Spring		6740	2/23	11	3.4	--	--
Packsaddle Springs		8200	3/2	44	14.3	--	--
Pebble Creek		6550	2/28	18	5.6	16.5	14.5
Perreau Meadows		8500	2/25	33	8.8	12.2	--
Phillips Bench	Wyoming	8200	3/1	43	11.5	20.7	23.2*
Pierce Ranger Station		3080	2/27	6	1.6	5.6	10.9
Pine Creek Pass		6810	3/2	31	8.8	10.7	15.6
Placer Creek		5860	2/25	40	12.8	13.4	16.5
Pole Creek Ranger Station		8360	2/27	29	7.8	17.8	18.6
Prairie		4800	2/26	0	0.0	3.7	5.8
Rammel Ridge		8240	2/25	58	19.1	--	--
Red Canyon (A)		6520	2/27	T	0.1	--	6.6
Redfish Lake Flat		6560	2/24	19	6.5	11.9	8.9*
Road Creek		5380	2/26	11	3.4	--	10.4*
Rock Flat Summit		5310	2/27	43	11.5	13.8	16.7
Roland Summit (A)		5120	2/25	30	11.4	19.6	31.3
Sage Creek Saddle		4080	2/24	8	2.6	9.8	--
Savage Pass		6170	2/27	54	15.0	19.8	24.1
Sawmill Canyon		7000	2/27	23	4.9	7.0	6.9
Sawtell Mountain		8720	2/26	66	21.0	28.6	28.4*
Schwartz Lake		8540	2/27	29	6.0	10.7	10.8*
Schweitzer Bowl		4800		Plowed Out		21.1	28.1*
Schweitzer Ridge		6200	3/2	75	29.2	42.8	40.3*
Secesh Summit		6520	2/27	63	21.6	30.8	30.9*
Sedgwick Peak		7850	2/28	29	7.3	16.9	--
Seventy-six Creek	Nevada	7100	2/27	16	5.1	11.6	10.4
Shanghai Summit		4570	2/27	17	5.4	11.9	24.1
Sheep Mountain		6570	2/26	22	6.4	11.7	12.5*
Sherwin		3200	2/25	7	2.6	5.7	13.3
Shoshone Basin		5810	2/27	0	0.0	6.7	5.3
Silver City		6400	2/28	14	5.6	16.3	13.7
Slug Creek Divide		7230	2/25	25	8.0	16.7	14.8
Soldier Ranger Station		5740	3/1	19	6.4	12.1	11.5
Somsen Ranch		6840	2/24	26	6.7	14.4	12.7
South Mountain		6500	2/28	16	6.2	15.6	11.6
Squaw Flat		6240	3/1	46	11.9	20.4	--
Squaw Meadow		5900	2/28	62	22.4	32.1	31.9
State Line		6660	3/2	28	8.3	10.1	12.7
Stickney Mill		7430	2/25	26	7.4	9.7	8.3
Strawberry Creek		5820	2/24	14	4.1	9.6	9.6
Strawberry Mink Divide		6720	2/23	28	7.5	21.4	18.7
Sublett		5950	2/26	15	4.2	9.3	10.1
Succor Creek (A)		6200	2/27	9	3.5	--	5.6
Sulphur Peak		7070	2/24	25	6.5	15.5	--
Sunset (A)		5540	2/25	70	22.9	24.3	32.6*
Swede Peak		7640	2/27	40	11.2	16.5	15.2
Targhee Pass		6980	2/26	30	7.6	9.0	13.6*
Telfer Ranch		5840	2/27	14	5.3	9.2	7.8
Teton Pass W.S.	Wyoming	7740	3/1	38	11.3	17.4	21.0*
Tex Creek		6650	2/26	26	6.4	9.0	8.5*
Trinity Mountain		7770	2/26	60	20.7	38.8	38.2
Tripod Summit		5260	2/27	30	10.5	15.2	16.7
Twin Peaks (A)		9190	2/27	45	11.9	19.6	23.0*
Upper Elkhorn		7140	2/23	27	6.9	20.0	16.4*
Upper Home Canyon		8560	2/25	34	10.4	20.7	19.9*
Valley View		6680	2/26	31	9.2	11.7	15.6
Vaught Ranch (A)		5830	2/27	0	0.0	--	4.1*
Vienna Mine		8960	2/25	65	20.1	35.0	32.1
Vi Pont	Utah	7670	2/26	27	6.5	14.8	12.9*
War Eagle (A)		7280	2/27	42	16.4	--	19.6*
Webb Creek		4720	2/27	0	0.0	7.1	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Webber Creek	6700	2/26	23	4.0	--	--
West Twin	4220	2/27	0	0.0	3.6	9.4
Wet Creek Summit	7680	2/25	28	7.4	9.7	10.7
Whiskey Flat No. 1	6960	2/26	10	2.8	9.8	8.5
White Elephant	7710	2/26	50	14.7	21.2	18.4 *
Wildhorse Divide	6480	3/1	29	7.8	--	--
Williams Creek Summit	7990	2/25	24	5.2	9.5	11.1
Willow Flat	6070	2/23	20	6.2	15.6	13.9
Wilson Creek	7500	2/27	T	T	11.5	11.0
Wood Canyon Divide	7450	2/24	26	6.9	16.9	--
Worm Creek	6620	2/23	27	8.0	19.5	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
- Forest Service
- ESCS Crop Reporting Service
- SEA Agricultural Research

U. S. Department of Commerce
- NOAA, National Weather Service

U. S. Department of the Interior
- Bonneville Power Administration
- Water and Power Resources Service
- Fish and Wildlife Service
- Water Resources Division, Geological Survey
- National Park Service
- Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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Water Supply Outlook For Idaho

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IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
APR. 1, 1981

IMPORTANT NOTICE INSIDE

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservotion Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK

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WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
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In Cooperation with

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DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR APRIL 1, 1981

Snow surveys performed near April 1 indicate a below to well below normal seasonal runoff in 1981. Water supplies for irrigation will be adequate on larger drainages having sufficient reservoir facilities. Serious to critical shortages are in prospect for small and low elevation streams without storage.

Major reservoirs are expected to fill prior to irrigation draw-down. Reservoirs south of the Snake River, such as Salmon Falls and Oakley will not fill. Many small reservoirs north of the Snake, such as the Mountain Home project facilities and other small reservoirs throughout the state are also unlikely to fill. A combination of 16 major irrigation reservoirs in the Snake Basin stand at 91 percent of capacity as of April 1. Normally they would contain only 71 percent of capacity on that date.

In general, the maximum yearly accumulation of snow water equivalent is recorded near April 1st. The 1981 snowpack is extremely variable with all watersheds reporting below to well below normal conditions. Many watersheds, particularly the small, low elevation drainages have a critical shortage of snow. The Hayden Lake watershed in Northern Idaho is bare and the Palouse drainage has only a 15 percent of normal snowpack. Other watersheds range from a low of 36 percent

of average on Montpelier Creek in Southeastern Idaho to 84 percent of normal on the Big Lost River drainage. The Big Lost watershed is the only area reporting above 70 percent of average snowpack.

Forecasts of April through September seasonal streamflow range from a low of 32 percent of normal for Montpelier Creek near Montpelier to a high of 76 percent of average for the Big Lost at Howell Ranch.

March's weather systems brought much needed precipitation to the extreme southern portion of Idaho. This area, which has had only 50 to 70 percent of normal precipitation for the water year, received up to 200 percent of normal for March. Grace received 193 percent, Pocatello 180 percent, and Twin Falls 164 percent. Elsewhere in the State, precipitation varied greatly for March from a high of 273 percent at Boise to a low of 26 percent at Porthill.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

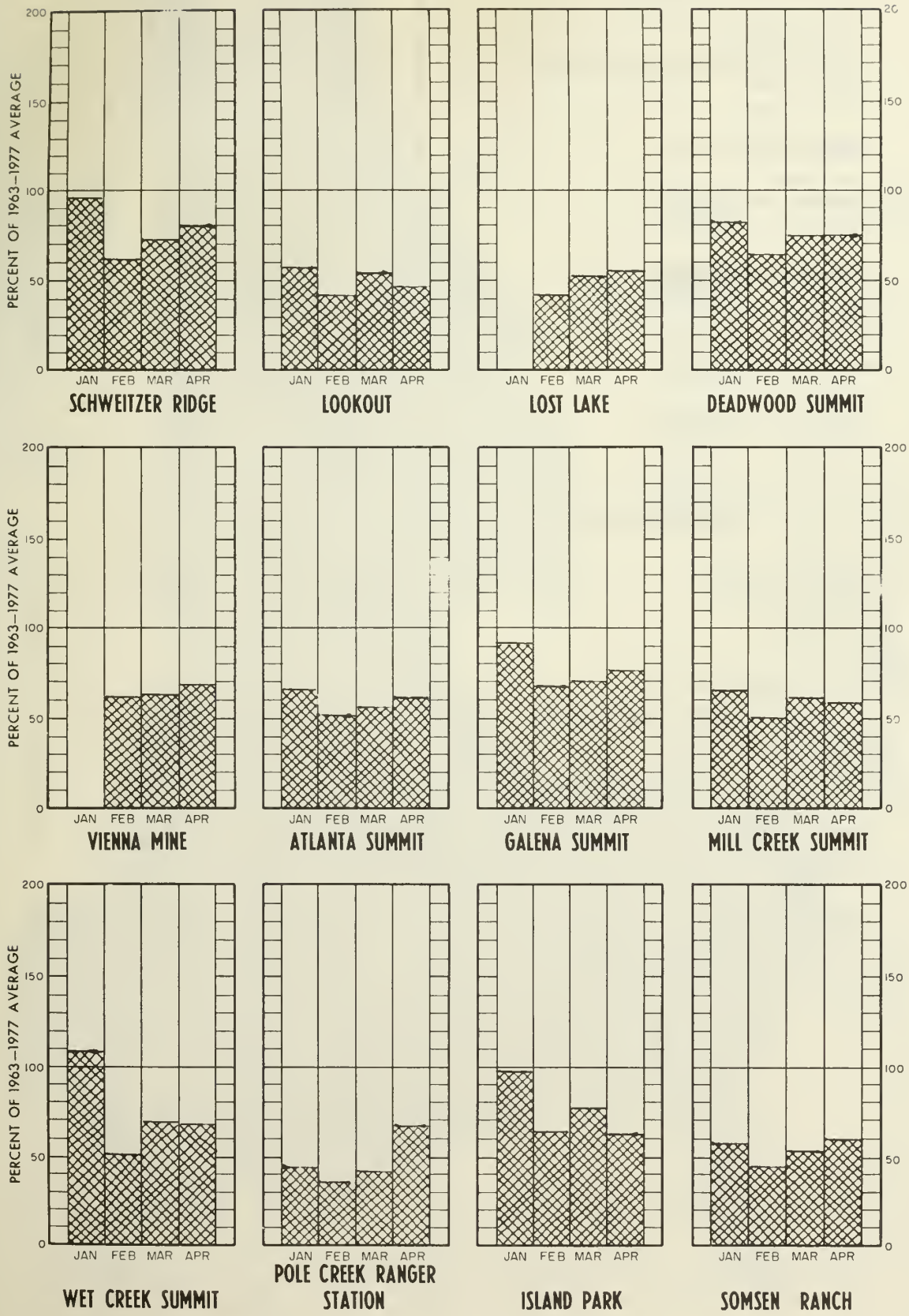
DRAINAGE DIVISIONS	Winter March 1981		Fall - Winter Nov. 80 - Mar. 81	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	1.37	- 0.37	13.69	+ 0.30
Flathead	1.56	+ 0.03	9.99	- 0.74
Clark Fork	0.93	- 0.29	6.46	- 1.54
Pend Oreille-Spokane	1.45	- 1.08	15.12	- 2.43
Upper Snake	1.04	- 0.48	6.99	- 3.12
Snake River Plain	1.25	+ 0.47	4.15	- 0.93
Salmon-Payette-Boise	1.64	- 0.09	11.57	- 0.22
Clearwater	2.06	- 0.90	15.47	- 2.41
Owyhee-Malheur	1.55	+ 0.70	5.37	- 0.30

1/ Preliminary analysis and data by the National Weather Service and Meterological Service of Canada.

2/ Departure from 15-year (1963-77) drainage division average.

SNOW WATER DEPTHS ACCUMULATION
For Selected Snow Courses
As Compared To 1963 – 1977 15 Year Average

APRIL 1, 1981



COMPARISON of SNOW COVER

RIVER BASIN WATERSHED	NO. OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF : LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA RIVER BASIN			
Kootenai River	46	78	66
Pend Oreille River	102	78	62
Clark Fork River	32	84	68
Flathead River	31	87	68
Priest River	3	65	65
Spokane River	15	62	40
LOWER SNAKE RIVER BASIN			
Palouse River	3	33	15
Clearwater River	21	65	48
Salmon River	27	68	66
Lemhi River	6	67	66
MIDDLE SNAKE RIVER BASIN - Northside			
Little Lost River	5 - 6	70	59
Big Lost River	9	84	84
Fish Creek	2	41	51
Little Wood River	4	59	68
Big Wood River	11 - 13	65	69
Boise River	17 - 20	50	55
Canyon Creek	3	34	37
Payette River	14 - 17	57	61
Weiser River	7 - 9	66	64
Mann Creek	4 - 5	70	70
MIDDLE SNAKE RIVER BASIN - Southside			
Raft River	5 - 7	62	65
Goose-Trapper Creek	3 - 5	55	60
Salmon Falls Creek	10	46	59
Bruneau River	5	52	61
Owyhee River	7	21	32
Jordan Creek	2	39	50
UPPER SNAKE RIVER BASIN			
Snake Basin - Above Palisades Reservoir	30	55	53
Camas-Beaver Creeks	3	77	67
Henrys Fork River	11	72	65
Teton River	8 - 9	63	56
Willow Creek	5 - 7	47	55
Blackfoot River	3 - 6	45	43
Portneuf River	4 - 10	48	55
GREAT BASIN			
Bear River - Upper	6	51	63
Bear River - Lower	14	39	46
Montpelier Creek	6	35	36
Mink Creek	7	42	52
Cub River	3 - 4	41	48
Malad River	4 - 6	37	50

SNOW WATER DEPTHS
As percent of 1963-77 15 year average

APRIL 1, 1981

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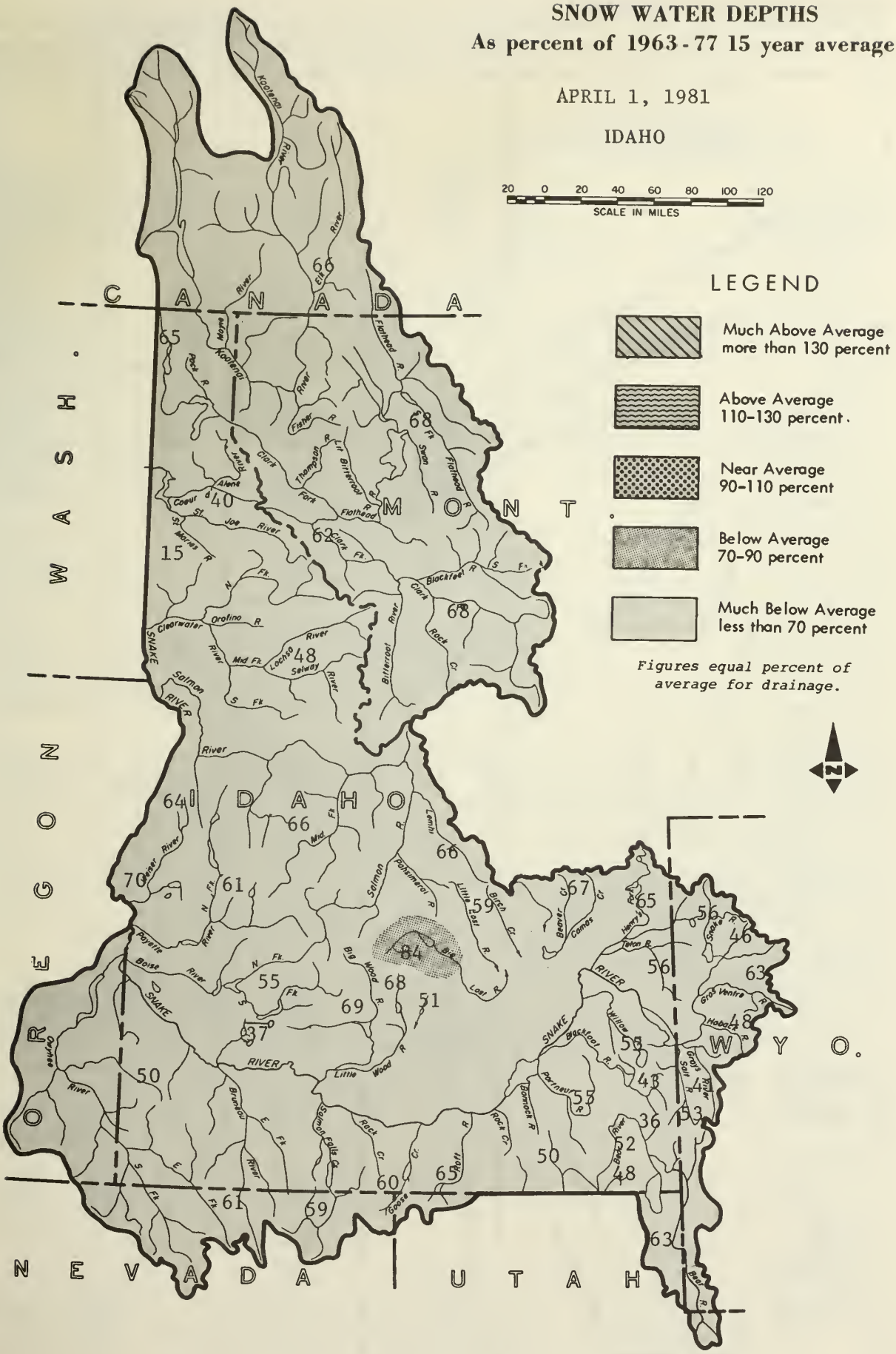


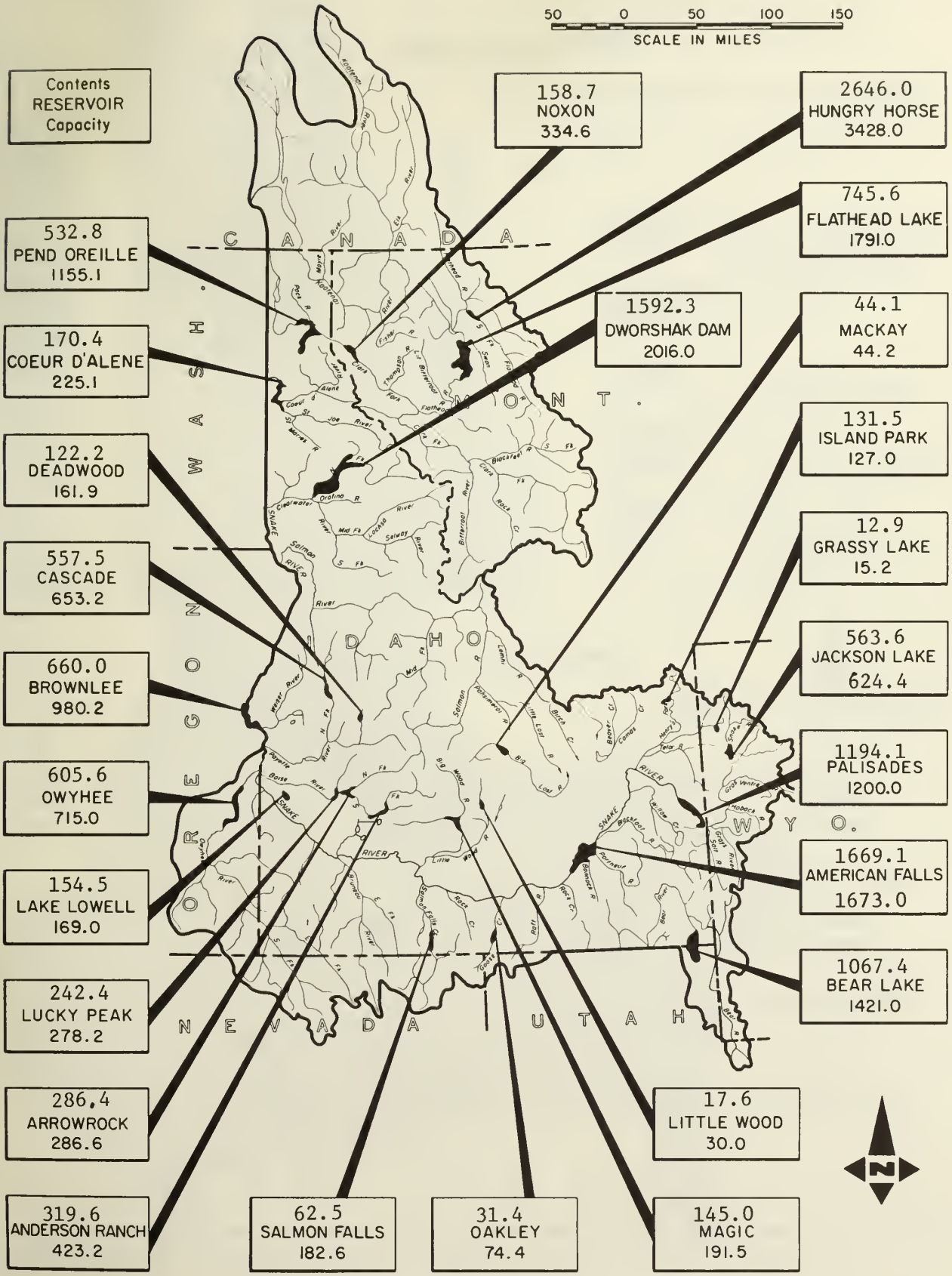
RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2646.0	2730.0	2016.0
Flathead	1791.0	745.6	632.7	775.7
Pend Oreille	1155.1	532.8	123.7	432.9
Noxon	334.6	158.7	139.4	191.9
Spokane				
Coeur d'Alene	225.1	170.4	87.1	149.9
SNAKE BASIN				
Snake				
Jackson Lake	624.4	563.6	555.8	612.9
Palisades	1200.0	1194.1	929.9	815.9
American Falls	1673.0	1669.1	1608.6	1390.8
Island Park	127.0	131.5	121.3	122.5
Grassy Lake	15.2	12.9	11.8	10.8
Brownlee	980.2	660.0	614.2	395.5
Goose-Trapper Creeks				
Oakley	74.4	31.4	42.7	33.1
Salmon Falls Creek				
Salmon Falls	182.6	62.5	54.2	63.7
Big Lost				
Mackay	44.2	44.1	29.4	32.9
Big Wood				
Magic	191.5	145.0	49.9	129.9
Little Wood				
Little Wood	30.0	28.3	17.6	18.5
Fish Creek				
Carey Valley	14.4	9.4	4.7	--
Boise				
Anderson Ranch	423.2	319.6	223.2	248.5
Arrowrock	286.6	286.4	279.2	226.6
Lucky Peak	278.2	242.4	91.2	115.5
Lake Lowell (Deer Flat)	169.0	154.5	146.7	139.3
Owyhee				
Owyhee	715.0	605.6	698.9	553.2
Payette				
Cascade	653.2	557.5	311.8	305.4
Deadwood	161.9	122.2	64.4	92.0
Weiser				
Mann Creek	11.1	11.2	11.1	--
Clearwater				
Dworshak	2016.0	1592.3	942.3	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1067.4	1036.2	1039.5

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

APRIL 1, 1981

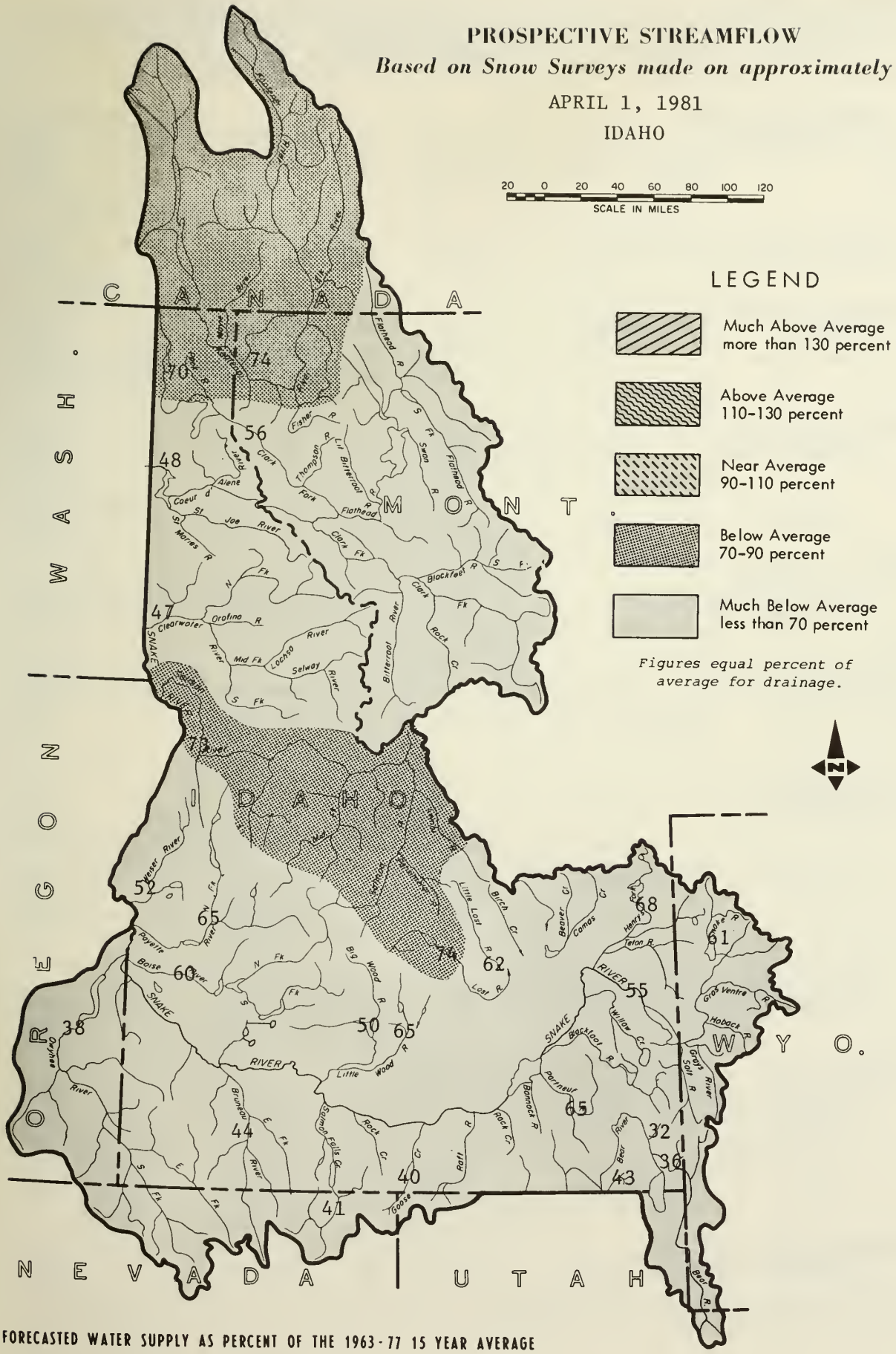


STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST c Thousand Acre Feet	THIS YEAR FORECAST c Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	6550	74	Apr-Sep	--	8858
		5690	74	Apr-Jul	--	7708
		4500	73	Apr-Jun	--	6144
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	7850	57	Apr-Sep	--	13781
		7130	57	Apr-Jul	--	12519
		6000	56	Apr-Jun	--	10633
Priest River						
Priest River 1/	(at)	588	70	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls 2/	(at)	1400	48	Apr-Sep	--	2910
St. Joe River						
Calder	(at)	640	49	Apr-Sep	--	1309
		620	50	Apr-Jul	--	1238
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran 3/	(at)	550	61	Apr-Sep	--	903
Palisades Inflow 3/		2200	57	Apr-Sep	--	3863
Heise 4/	(nr)	2350	55	Apr-Sep	--	4247
Blackfoot 5/	(nr)	2610	57	Apr-Jul	--	4579
Henrys Fork						
Ashton 6/	(nr)	500	68	Apr-Sep	--	737
Rexburg 7/	(nr)	1000	66	Apr-Sep	--	1534
Portneuf River						
Topaz	(at)	70	65	Mar-Sep	--	108
Oakley Reservoir Inflow		14.4	40	Mar-Sep	--	36

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.



FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
Salmon Falls Creek						
San Jacinto	(nr)	39	41	Mar-Sep	--	95
		37	41	Mar-Jul	--	90
		35	41	Mar-Jun	--	85
Bruneau River						
Hot Springs	(nr)	110	44	Mar-Sep	--	251
Little Lost River						
Howe	(nr)	28	62	Apr-Sep	--	45
Wet Creek	(bl)	25	61	Apr-Sep	--	41
		16	62	Apr-Jun	--	26
Big Lost River						
Howell Ranch	(at)	170	76	Apr-Sep	--	225
		115	75	Apr-Jun	--	154
Mackay 8/	(nr)	150	74	Apr-Sep	--	204
Big Wood River						
Magic Reservoir		160	50	Apr-Sep	--	319
Inflow 9/		167	50	Mar-Jul	--	332
Little Wood River						
Carey	(nr)	70	65	Apr-Sep	--	107
		65	66	Apr-Jul	--	99
		57	66	Apr-Jun	--	87
Boise River						
Twin Springs	(nr)	450	62	Apr-Sep	--	733
		420	62	Apr-Jul	--	676
Boise 10/	(nr)	910	55	Apr-Sep	--	1656
		850	55	Apr-Jul	--	1536
		750	55	Apr-Jun	--	1360
South Fork						
Anderson Dam 11/	(at)	300	48	Apr-Sep	--	622
		280	48	Apr-Jul	--	582
Owyhee River						
Gold Cr., Nv. 12/	(nr)	8	36	Apr-Jul	--	22
Owyhee, Nv. 12/		29	36	Apr-Jul	--	80
Lake Owyhee		150	38	Apr-Sep	387	332
net inflow 13/		139	38	Apr-Jul	352	431
Rome	(at)	137	38	Apr-Jul		361
Payette River						
Horseshoe Bend 14/	(nr)	1210	65	Apr-Sep	--	1860

(c) Assuming normal meteorological conditions.

† 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
North Fork						
Cascade 15/	(at)	365	65	Apr-Sep	--	564
Banks 15/		470	65	Apr-Sep	--	726
Weiser River						
Weiser	(nr)	231	52	Apr-Sep	--	442
Salmon River						
Whitebird	(at)	5270	73	Apr-Sep	--	7196
Clearwater River						
Spalding	(at)	4040	47	Apr-Sep	--	8672
GREAT BASIN						
BEAR RIVER						
Harer	(at)	121	36	Apr-Sep	--	332
Montpelier Creek						
Montpelier	(nr)	4	32	Apr-Sep	--	12.4
Cub River						
Preston	(nr)	21.5	43	Apr-Sep	--	50.0
		20.0	43	Apr-Jul	--	47.0

1/ Observed flow corrected for storage in Priest Lake.
2/ Observed flow corrected for storage in Coeur d'Alene Lake.
3/ Corrected for storage in Jackson Lake
4/ Corrected for storage in Jackson Lake and Palisades.
5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
8/ Observed flow corrected for storage in Mackay Reservoir.
9/ Combined flow Big Wood River nr. Bellevue and Camas Creek near Blaine
10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
11/ Corrected for storage in Anderson Ranch Reservoir.
12/ Corrected for storage in Wildhorse Reservoir.
13/ From Water & Power Resources Service records of inflow.
14/ Corrected for storage in Cascade and Deadwood Reservoirs.
15/ Corrected for storage in Cascade Reservoir.
Cooperative forecasts released by Soil Conservation Service and National Weather Service.

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Above Burke		4100	3/31	25	8.4	17.4	24.7*
Above Gilmore		8240	3/31	35	8.9	9.2	10.6
Above Roland		4350	4/4	40	13.6	25.4	35.2*
Antelope Ridge		6180	3/27	0	0.0	4.4	6.2
Aspen Grove		6500	3/26	31	9.1	15.1	12.1*
Aspen Hall Pass (A)		8200	3/31	37	8.0	11.8	10.6*
Atlanta Summit		7600	4/2	71	22.0	37.1	36.2
Atlanta Townsite		5280	4/2	7	2.7	12.1	--
Austin Brothers Ranch		6400	3/30	0	0.0	9.0	8.9
Bad Bear		4940	3/31	12	4.0	15.1	13.9
Badger Gulch		6660	4/4	23	7.2	15.7	13.1
Banner Summit		7040	4/2	71	22.2	32.2	--
Battle Creek (A)		5710	4/7	0	0.0	0.0	1.7
Bear Basin		5350	3/30	44	11.8	21.5	--
Bear Canyon		7900	4/2	63	16.8	20.0	19.9
Bear Creek	Nevada	8040	3/31	50	13.9	23.9	21.3
Bear Mountain		5400	4/2	113	41.9	47.6	64.2*
Bear Saddle		6180	3/29	48	18.5	27.0	--
Beaverdam Creek		6120	3/28	19	4.3	12.2	--
Below Roland		3920	4/4	0	0.0	12.4	16.5*
Bennett Mountain		6560	3/28	34	11.1	17.2	17.5
Benton Meadow		2370	3/30	0	0.0	4.6	5.0
Benton Spring		4920	3/30	26	9.5	15.9	20.2
Big Creek Summit		6580	3/27	72	23.8	41.8	37.5
Big Springs		6400	4/1	38	12.9	18.3	22.0
Birch Creek		6800	3/26	18	6.9	11.6	11.4*
Black Canyon		7960	4/1	72	24.4	34.8	35.4*
Black Moose		8160	4/1	70	25.2	37.0	40.3*
Blue Ledge Mine		6900	3/30	35	11.0	14.4	17.8
Blue Ridge		6780	3/25	39	12.6	21.7	--
Bogus Basin		6340	4/1	46	14.3	30.5	24.5
Bogus Basin Road		5540	4/1	5	0.7	3.5	2.2
Bone		6200	3/25	0	0.0	7.8	7.2*
Borah (A)		8250	3/31	18	4.7	7.3	--
Bostetter Ranger Station		7500	4/4	48	12.5	20.6	20.2
Boulder Creek		5440	3/31	33	11.6	18.0	25.1
Boy Scout Camp		7740	4/4	43	13.4	17.8	15.8
Breezy Saddle		5010	4/8	52	15.4	21.6	--
Brockman Station		6430	3/25	0	0.0	11.7	--
Brundage Mountain		7560	3/30	99	34.0	52.2	48.6*
Buck Meadows		5650	3/31	52	14.5	21.4	31.2*
Bull Basin (A)		5480	4/7	0	0.0	0.1	0.4
Camas Creek Divide		5710	3/28	0	0.0	12.5	8.8*
Camp Creek		6580	3/31	35	9.6	10.2	12.0
Cayuse Airstrip		3500	3/31	0	0.0	5.2	9.8
Cedar Creek		6820	3/31	13	4.0	11.5	10.0
Chilco Ridge		3650	3/30	0	0.0	2.3	--
Chimney Creek		6400	3/28	17	6.8	16.8	--
Christensen Ranch		5560	3/28	18	4.1	12.7	7.6
Clear Creek Meadows	Utah	9420	4/4	65	18.1	19.8	23.6
Cliff Canyon		7200	3/28	16	4.3	10.2	--
Cold Springs		7000		No report		30.4	--
Conie Ridge		3900	3/30	0	0.0	2.9	--
Coolwater Mountain		6040	3/31	67	18.9	28.7	33.0
Copes Camp		7520	3/31	25	5.8	9.4	8.8
Copper Basin		7640	4/2	33	8.9	9.7	10.9
Copper Ridge		4820	4/1	17	3.6	10.2	29.7
Corner Creek		3150	3/30	0	0.0	4.5	--
Couch Summit		6840	3/28	39	13.0	21.7	18.7
Cozy Cove		5380	4/2	24	8.3	17.8	16.6
Crater Meadows		5960	3/31	69	21.9	34.6	46.3
Crawford Ranger Station		4860	3/27	0	0.0	6.5	6.1
Crooked Fork		3610	3/31	0	0.0	8.5	14.1*
Cub River Ranger Station		5450	3/25	9	3.2	10.4	6.9
Daniels Creek		6270	3/28	6	2.0	9.6	--
Darby Canyon	Wyoming	8250	3/27	50	14.9	23.2	24.0*
Deadline		6900	3/31	38	12.3	34.2	22.3
Deadman Gulch		5600	3/28	23	8.2	16.2	16.8*
Deadwood Airstrip		5360	4/2	29	10.6	17.9	15.6
Deadwood Summit		6860	4/2	99	35.3	51.1	47.5
Dempsey Creek		6100	3/29	28	9.2	13.7	13.0
Dollarhide Summit		8420	4/2	62	18.5	25.9	25.1
Double Springs Pass (A)		8400	3/31	30	7.9	9.7	11.1*

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Dry Basin		7820	3/28	60	17.0	38.4	30.2
Dry Creek Flat		6360	3/28	6	0.9	10.4	5.3
Dry Fork		7220	3/31	36	12.4	17.4	16.9*
East Creek		7000	3/28	26	6.7	12.0	--
East Twin		4130	4/1	4	0.6	4.2	9.8
Elk Butte		5550	4/8	59	16.1	25.4	38.8
Emigrant Summit		7390	3/30	43	12.6	27.6	26.0
Emigration Canyon		6500	3/30	16	5.4	14.3	11.1
Fairview Guard Station		6750	3/31	0	0.0	3.2	3.2
Fish Lake Airstrip		5650	3/31	63	19.4	32.0	41.2
Fishpole Lake		9300	4/2	72	22.7	24.9	21.1*
Forty-nine Meadows		4830	4/8	48	16.2	19.7	32.5
Fourth of July Summit		3200	3/30	0	0.0	3.9	8.8
Fox Creek	Nevada	6750	3/31	13	3.9	12.8	9.9*
Franklin Basin		8040	3/26	49	14.4	32.1	28.2
Freds Mountain	Wyoming	8150	3/31	54	15.3	23.8	20.7*
Galena		7440	3/31	40	15.0	19.5	19.5
Galena Summit		8780	3/31	61	19.0	23.7	25.2
Garfield Ranger Station		6560	3/31	17	6.4	13.9	10.2
George Creek	Utah	8840	4/4	55	15.5	--	--
Gibbons Pass	Montana	7100	3/26	53	17.8	20.4	24.8
Giveout		6860	4/3	22	4.8	14.0	13.0
Goat Creek	Nevada	8880	3/31	43	11.4	22.2	18.6
Goat Lake		6500	3/31	87	25.8	38.2	49.3
Graham Guard Station		5690	4/2	20	7.1	16.6	--
Graham Ranch		6270	3/31	37	12.2	15.6	14.4
Granite Peak		6000	4/8	92	22.1	33.8	46.8
Grassy Lake	Wyoming	7265	3/30	65	22.7	31.3	36.6
Hall Creek		7560	3/31	19	4.8	8.2	5.9*
Halverson Creek		4850	4/2	99	36.4	41.2	44.2*
Hell Creek		7350	3/26	28	8.8	15.5	--
Hemlock Butte		5810	4/8	83	23.8	35.0	51.3
Hilts Creek		8000	3/27	42	11.0	12.2	--
Hoodoo Basin	Montana	6000	3/31	97	34.4	47.2	53.6*
Hoodoo Creek	Montana	5900	3/31	84	28.5	42.8	49.9
Horseshoe Basin		8000	3/28	59	17.3	39.8	25.6
Howell Canyon		7980	4/4	39	12.7	26.9	26.1
Hummingbird Springs	Nevada	8870	3/31	55	14.3	28.1	23.7
Hyde Pasture (A)		5760	4/7	0	0.0	2.3	3.2
Hyndman Creek		7440	4/2	47	12.8	16.7	--
Indian Grove		7560	4/4	29	7.4	15.2	--
Iron Bog		7650	3/31	30	11.0	14.8	14.1
Iron Mine Creek		6300	3/31	22	8.8	12.6	10.5
Irving Creek		7040	3/30	23	5.7	--	--
Island Park		6290	4/1	32	10.7	16.0	17.2
Jackpine Creek	Wyoming	7350	3/30	38	11.9	20.1	23.0*
Jackson Peak		7070	4/2	72	21.7	35.0	33.1
Johnson Creek		6730	3/30	31	8.4	16.3	--
Kellogg Peak		5560	4/4	45	13.6	25.0	35.4
Kilgore		6320	3/30	23	7.1	11.2	11.5
Kit Carson Pasture		4950	3/28	7	2.4	8.7	9.1
Kruse Meadow		4780	3/25	0	0.0	9.7	--
Lake Fork		5290	3/29	25	8.8	15.1	16.9
Latham Springs		7630	4/1	67	23.8	31.2	34.8
Leadbelt		6700	3/31	20	8.6	10.6	9.4
Leatherman Pass		9860	3/31	71	19.9	19.8	26.1*
Lemhi Pass	Montana	7480	4/2	26	7.0	9.5	9.9
Lemhi Ridge	Montana	8100	4/2	36	8.9	10.4	10.9*
Liberty Spring		8600	3/28	71	17.8	40.7	39.8
Little Beaver		6970	4/3	24	6.6	16.1	16.3
Little Camas Flat		4940	3/28	0	0.0	2.7	4.0
Logger Springs		8120	4/4	56	12.9	21.6	--
Lolo Pass		5240	3/31	44	14.1	26.3	32.6
Lookout		5140	3/31	50	17.4	26.4	37.1
Lost Garfield		6600	3/31	0	0.0	4.2	3.0
Lost Lake		6110	4/8	113	34.3	40.3	61.8*
Lost-Wood Divide		7900	4/2	60	18.3	24.3	24.8
Lower Elkhorn		6960	3/28	23	6.9	18.9	14.0*
Lower Home Canyon		7640	4/3	24	6.5	15.3	14.9*
Lower Pebble		5780	3/29	14	5.4	15.0	13.3*
Lower Sands Creek		3120	3/31	11	4.2	11.5	21.9
Lucky Dog		6860	4/1	49	17.6	22.2	26.0

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Magic Mountain		6880	3/31	37	11.9	21.3	19.2
Mann Creek		6080	3/29	48	18.8	25.6	27.7*
Mascot Mine		7780	4/2	49	13.2	15.6	15.5
McRenolds Reservoir		6720	3/30	36	11.3	16.8	20.7*
Meadow Lake		9150	3/31	55	15.3	16.0	20.8
Mill Creek Summit		8800	3/31	50	14.3	21.8	24.1
Mink Creek		6410	3/29	44	12.4	20.9	18.3
Montpelier Creek		6540	4/3	0	0.0	8.8	8.4
Moonshine		7440	3/31	30	6.8	9.4	11.2
Moores Creek Summit		6100	3/31	56	17.6	35.6	33.6
Moose Creek		6200	3/31	38	10.8	12.2	17.1
Morgan Creek		7600	3/31	36	9.0	12.8	14.9
Morse Creek Sawmill		7120	3/31	31	8.1	9.7	9.5
Moscow Mountain		4410	4/1	16	4.3	11.0	18.0
Mosquito Ridge		5200	4/4	77	25.6	28.2	40.2
Mount Baldy		8920	3/30	59	16.9	20.2	21.4
Mountain Meadows		6360	3/31	44	11.2	16.6	26.1*
Mud Creek		7100	3/25	34	12.1	--	--
Mud Flat		5730	3/27	0	0.0	8.0	4.9
Muldoon		6320	3/30	4	1.1	9.5	7.1
Nez Perce Pass	Montana	6570	3/28	28	8.8	13.8	--
One Mile Summit		7330	4/4	22	5.3	7.5	7.6
Oxford Mountain		6800	3/28	20	5.1	12.3	9.5
Packsaddle Springs		8200	3/27	53	16.8	--	--
Pebble Creek		6550	3/29	20	6.9	20.3	16.7
Perreau Meadows		8500	3/30	42	11.2	16.2	--
Phillips Bench		8200	3/30	57	15.6	26.0	30.6*
Pierce Ranger Station		3080	3/31	0	0.0	6.9	10.6
Pine Creek Pass		6810	3/31	33	8.7	14.6	18.3
Placer Creek		5860	3/28	39	12.2	24.2	18.8
Pole Creek Ranger Station		8360	3/31	49	14.9	24.2	22.5
Prairie		4800	3/29	0	0.0	0.0	3.4
Rammel Ridge		8240	3/30	66	22.3	--	--
Red Canyon (A)		6520	3/30	T	0.1	11.0	5.0
Red Fish Lake Flat		6560	3/27	24	7.2	14.4	10.9*
Road Creek		5380	4/2	7	2.4	10.1	9.2*
Robinson Creek Ridge		6220	3/29	39	15.8	20.0	21.3*
Rock Flat Summit		5310	3/30	43	10.8	18.2	19.6
Roland Summit		5120	4/4	44	13.0	30.2	40.1*
Sage Creek Saddle		4080	3/30	3	0.5	11.3	--
Savage Pass		6170	3/31	52	17.6	24.8	28.6
Sawmill Canyon		7000	3/27	25	6.8	8.2	8.1
Sawtell Mountain		8720	3/31	78	26.0	35.5	35.1*
Schwartz Lake		8540	3/31	37	9.0	13.1	13.8
Schweitzer Bowl		4800	3/31		Plowed Out	25.1	30.9*
Schweitzer Ridge		6200	3/31	90	38.1	52.4	47.8*
Secesh Summit		6520	3/28	55	22.4	43.3	37.2*
Sedgwick Peak		7850	3/28	46	11.1	21.3	--
Seventy-six Creek	Nevada	7100	3/31	20	6.8	15.4	11.4
Shanghai Summit		4570	4/8	23	5.8	16.0	27.2
Sheep Mountain		6570	3/25	18	6.2	14.4	13.9*
Sherwin		3200	3/31	1	0.4	6.7	13.8
Shoshone Basin		5810	3/31	5	1.5	7.7	5.1*
Silver City		6400	3/27	18	6.0	16.1	15.4
Slug Creek Divide		7230	3/30	33	9.0	19.5	18.0
Smith Creek		4800	3/30	82	34.2	39.6	48.8
Soldier Meadow		4650	3/25	0	0.0	8.7	--
Soldier Ranger Station		5740	3/28	0	0.0	11.6	10.3
Somsen Ranch		6840	3/30	36	9.0	15.4	15.1
South Mountain		6500	3/27	24	8.2	20.4	13.0
Squaw Flat		6240	3/29	47	15.6	25.2	--
Squaw Meadow		5900	3/28	58	22.2	45.1	37.4
State Line		6660	3/31	33	7.7	14.2	15.3
Stickney Mill		7430	4/2	35	10.1	10.8	10.6
Strawberry Creek		5820	3/30	15	4.9	12.3	10.2
Strawberry Mink Divide		6720	3/28	40	10.0	29.7	21.9
Sturgill Ridge		6680	3/29	55	21.4	31.2	32.6*
Sublett		5950	4/4	16	5.6	12.2	11.1
Succor Creek (A)		6200	4/7	17	5.1	--	--
Sulphur Peak		7070	3/30	31	8.6	18.5	--
Sunset		5540	4/4	62	17.0	23.8	36.2
Swede Peak		7640	3/30	46	13.0	20.2	18.1
Targhee Pass		6980	3/31	31	9.0	11.3	17.1*

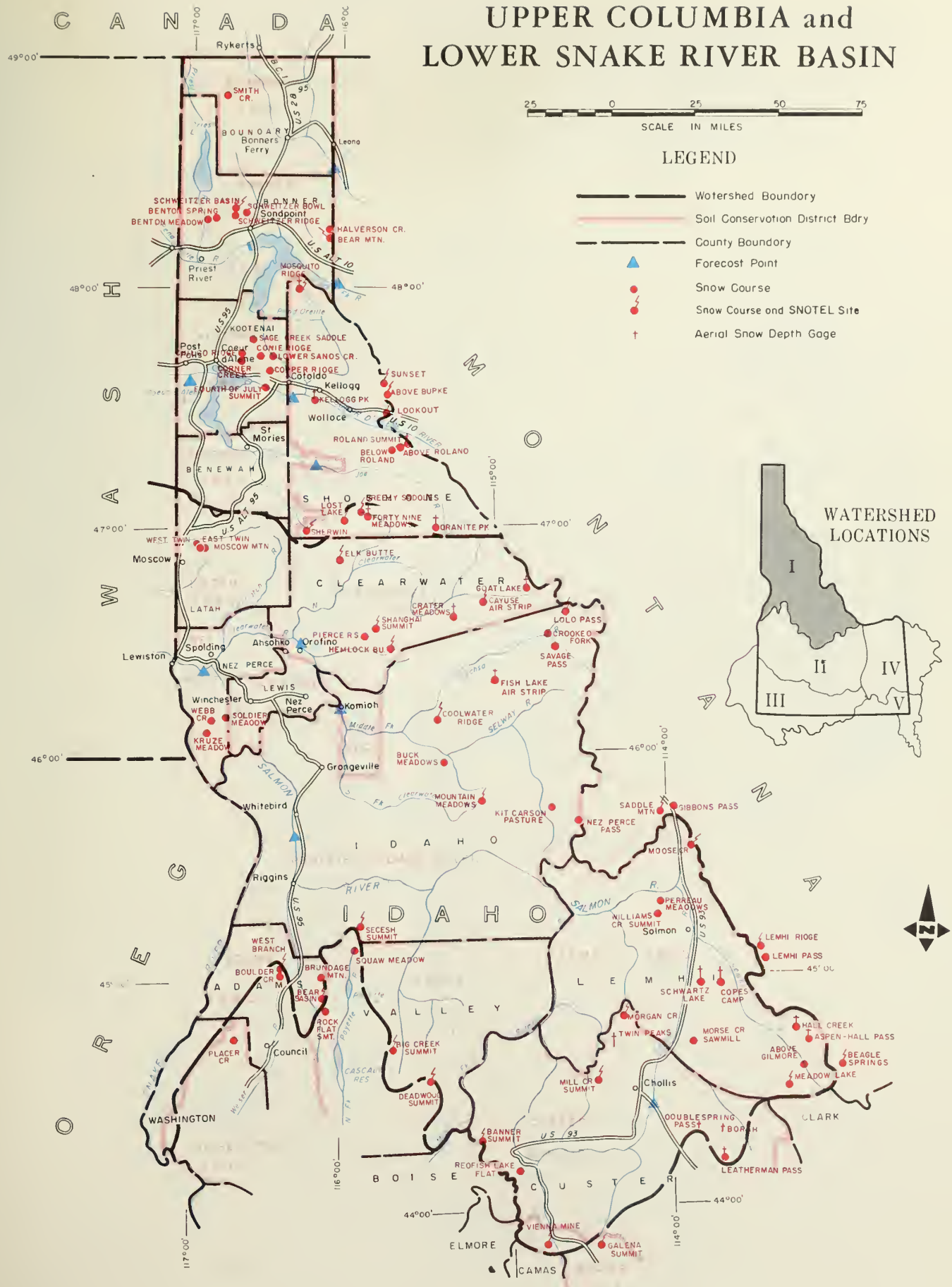
(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Telfer Ranch		5840	3/30	0	0.0	8.7	6.8
Teton Pass W.S.	Wyoming	7740	3/30	54	15.6	20.7	27.7*
Tex Creek		6650	3/26	28	7.6	10.8	9.7*
Thorson Cabin		5320	3/29	31	11.4	18.0	14.3*
Trinity Mountain		7770	4/2	80	26.5	45.2	43.2
Tripod Summit		5260	3/27	25	10.1	19.4	19.7
Twin Peaks (A)		9190	3/31	51	14.6	22.8	28.0
Upper Elkhorn		7140	3/28	44	11.4	22.0	19.5*
Upper Home Canyon		8560	4/3	44	12.1	25.0	25.1*
Valley View		6680	3/31	32	9.9	15.2	18.4
Vaught Ranch (A)		5830	4/7	0	0.0	0.0	1.7*
Vienna Mine		8960	4/2	86	26.8	41.1	38.7*
Vi Pont	Utah	7670	4/4	37	9.5	17.0	15.1*
War Eagle (A)		7280		No report		27.5	25.1*
Webb Creek		4720	3/25	0	0.0	10.1	--
Webber Creek		6700	3/30	24	5.4	--	--
West Branch		5560	3/31	46	17.5	--	--
West Twin		4220	4/1	4	0.8	2.0	9.1
Wet Creek Summit		7680	3/27	37	9.3	11.4	13.6
Whiskey Flat		6960	4/3	5	1.8	11.1	9.4
White Elephant		7710	3/31	58	18.5	26.4	25.6*
Williams Creek Summit		7990	3/30	34	8.0	10.8	13.5
Willow Flat		6070	3/25	18	6.6	20.4	14.8
Wilson Creek	Nevada	7500	3/31	15	4.2	16.0	11.9
Wood Canyon Divide		7450	3/30	37	9.7	20.3	--
Worm Creek		6620	3/28	41	11.6	25.2	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

UPPER COLUMBIA and LOWER SNAKE RIVER BASIN


SCALE IN MILES
25 0 25 50 75
LEGEND
Watershed Boundary
Soil Conservation District Bdry
County Boundary
Forecast Point
Snow Course
Snow Course and SNOTEL Site
Aerial Snow Depth Gage
WATERSHED LOCATIONS
I
II
III
IV
V
CANADA
WASHINGTON
IDAHO
OREGON
NEVADA
BONNER
KOOTENAI
BENEWAH
SHOSHONE
CLEARWATER
LATAH
NEZ PERCE
LEWIS
ADAMS
VALLEY
LEMHI
BOISE
CUSTER
ELMORE
CLARK
CAMAS
Rykerts
Bonners Ferry
Leona
Priest River
Sandpoint
Coeur d'Alene
Post Falls
Cataldo
Kellogg
Wallace
St Maries
Moscow
Lewiston
Spalding
Ahsahka
Orofino
Winchester
Nez Perce
Kamiah
Grangeville
Whitebird
Riggins
Salmon
Challis
Council
Cascade
Stanley
SCHWEITZER BASIN
BENTON SPRING
BENTON MEADOW
SCHWEITZER BOWL
SCHWEITZER RIDGE
HALVERSON CR.
BEAR MTN.
MOSQUITO RIDGE
SMITH CR.
SAGE CREEK SADDLE
COMET RIDGE
LOWER SANOS CR.
COPPER RIDGE
FOURTH OF JULY SUMMIT
KELLOGG PK
SUNSET
ABOVE BUPKE
LOOKOUT
ROLAND SUMMIT
BELOW ROLAND
ABOVE ROLAND
LOST LAKE
SHERWIN
FORTY NINE MEADOWS
GRANITE PK
WEST TWIN
EAST TWIN
MOSCOW MTN
ELK BUTTE
GOAT LAKE
CAYUSE AIR STRIP
CRATER MEADOWS
SHANGHAI SUMMIT
PIERCE RS
HEMLOCK BU
LOLO PASS
CROOKED FORK
SAVAGE PASS
FISH LAKE AIR STRIP
WEBB CR
SOLDIER MEADOW
KRUZE MEADOW
COOLWATER RIDGE
BUCK MEADOWS
MOUNTAIN MEADOWS
KIT CARSON PASTURE
NEZ PERCE PASS
SADDLE MTN
GIBBONS PASS
MOOSEER
PERREAU MEADOWS
WILLIAMS CR SUMMIT
LEMHI RIDGE
LEMHI PASS
SECESH SUMMIT
WEST BRANCH
BOULDER CR
BRUNDAGE MTN.
SQUAW MEADOW
BEAR BASIN
ROCK FLAT SMT.
PLACER CR
BIG CREEK SUMMIT
DEADWOOD SUMMIT
SCHWARTZ LAKE
COPES CAMP
MORGAN CR
TWIN PEAKS
MORSE CR SAWMILL
HALL CREEK
ASPEN-HALL PASS
ABOVE GILMORE
BEAGLE SPRINGS
MEADOW LAKE
MILL CR SUMMIT
DOUBLESPRING PASS
BORAH
LEATHERMAN PASS
BANNER SUMMIT
REDFISH LAKE FLAT
VIENNA MINE
GALENA SUMMIT
US 95
US 2
US ALT 10
US 10
US ALT 95
US 93
SALMON RIVER
SELWAY R.
Middle Fk
Clearwater
Lochsa
Pend Oreille
Kootenai
Coeur d'Alene
Spokane
Palouse
Pend Oreille
Pend Oreille
Pend Oreille

INDEX to SNOW COURSES

UPPER COLUMBIA BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		KOOTENAI RIVER				
16A7	I	Halverson Creek	3	57N	3E	4850
16A1	I	Smith Creek	29	64N	3W	4800
		PEND OREILLE-PRIEST RIVER				
16A8S	I	Bear Mountain	9	57N	3E	5400
16A2	I	Benton Meadow	27	58N	4W	2370
16A3	I	Benton Spring	30	58N	3W	4920
16A10S	I	Schweitzer Basin	18	58N	2W	6090
16A6	I	Schweitzer Bowl	20	58N	2W	4800
16A5	I	Schweitzer Ridge	19	58N	2W	6200
		HAYDEN CREEK				
16B8	I	Chilco Ridge	15	52N	2W	3650
16B7	I	Conie Ridge	22	52N	2W	3900
16B9	I	Corner Creek	22	52N	2W	3150
16B6	I	Sage Creek Saddle	10	52N	2W	4080
		SPOKANE RIVER				
15B8	I	Above Burke	11	48N	5E	4100
15B7	I	Above Roland	35	47N	6E	4350
15B6	I	Below Roland	35	47N	6E	3920
16B2	I	Copper Ridge	6	50N	1W	4820
16B3	I	Fourth of July Summit	6	49N	1W	3200
15B13A	I	Granite Peak	4	42N	8E	6000
16B5A	I	Kellogg Peak	19	48N	3E	5560
15B2S	I	Lookout	4	47N	6E	5140
16B1	I	Lower Sands Creek	32	51N	1W	3120
16A4AS	I	Mosquito Ridge	5	54N	2E	5200
15B5A	I	Roland Summit	26	47N	6E	5120
16C1S	I	Sherwin	28	42N	1E	3200
15B9AS	I	Sunset	33	49N	5E	5540

LOWER SNAKE BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		PALOUSE RIVER				
16C3	I	East Twin	13	40N	5W	4130
16C2	I	Moscow Mountain	18	40N	4W	4410
16C4	I	West Twin	14	40N	5W	4220
		CLEARWATER RIVER				
15B20SR	I	Breezy Saddle	1	43N	4E	5010
15D5	I	Buck Meadows	27	31N	8E	5650
15C3S	I	Cayuse Airstrip	4	38N	11E	3500
15C7S	I	Coolwater Mountain	31	33N	8E	6040
15C9A	I	Crater Meadows	11	37N	9E	5960
14C11	I	Crooked Fork	27	37N	14E	3610
16C15	I	Elk Butte	6	40N	3E	5550
15C2A	I	Fish Lake Airstrip	34	35N	11E	5650
15B3A	I	Forty-nine Meadows	6	43N	5E	4830
14C9A	I	Goat Lake	4	38N	13E	6500
16C6SR	I	Hemlock Butte	7	36N	7E	5810
15C10S	M	Hoodoo Basin	17	14N	27W	6000
15C1	M	Hoodoo Creek	16	14N	27W	5900
14D3	I	Kit Carson Pasture	4	27N	15E	4950
16C17	I	Kruze Meadows	11	32N	4W	4780
14C5S	I	Lolo Pass	16	38N	15E	5240
15B14S	I	Lost Lake	9	43N	4E	6110
15D6S	I	Mountain Meadows	9	27N	10E	6360
14D1	M	Nez Perce Pass	25	1S	24W	6570
15C5	I	Pierce Ranger Station	2	36N	5E	3080
14C4	I	Savage Pass	18	36N	15E	6170
15C4S	I	Shanghai Summit	7	37N	6E	4600
16C18	I	Soldier Meadows	33	33N	3W	4650
16C19	I	Webb Creek	36	33N	3½W	4720
		SALMON RIVER				
13E19	I	Above Gilmore	13	13N	26E	8240
13E21A	I	Aspen-Hall Pass	6	16N	28E	8200
16E11S	I	Bear Basin	30	19N	3E	5350
15E2S	I	Big Creek Summit	24	15N	5E	6580
13E8A	I	Borah	21	10N	23E	8250
16D6	I	Brundage Mountain	6	19N	3E	7560
13E17	I	Copes Camp	36	18N	22E	7520
13E25A	I	Double Springs Pass	3	10N	22E	8400
13D2	M	Gibbons Pass	4	2S	19W	7100
13E20	I	Hall Creek	1	16N	27E	7560
13E24A	I	Leatherman Pass	20	9N	23E	9860
13E1	M	Lemhi Pass	9	10S	15W	7480
13E23S	M	Lemhi Ridge	4	10S	15W	8100
13E18S	I	Meadow Lake	26	13N	26E	9150
14E1S	I	Mill Creek Summit	8	13N	17E	8800
13D16S	I	Moose Creek	14	27N	21E	6200
14E4S	I	Morgan Creek	31	18N	19E	7600
13E26	I	Morse Creek Sawmill	8	15N	23E	7120
14D5	I	Perreau Meadows	23	21N	20E	8500
14E7	I	Redfish Lake Flat	35	10N	13E	6560
13E16	I	Schwartz Lake	34	18N	22E	8540
14E3A	I	Twin Peaks	28	15N	17E	9190
14F4S	I	Vienna Mine	1	5N	13E	8960
14D4	I	Williams Creek Summit	34	21N	20E	7990

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

USDA-SCS-PORTLAND, OR 1980 M7-OL-22023-1

MIDDLE SNAKE RIVER BASIN NORTHSIDE

LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and SNOTEL Site
- Aerial Snow Depth Gage

USDA-SCS-PORTLAND, OR 1980

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MIDDLE SNAKE RIVER BASIN
NORTHSIDE

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elev
		LITTLE LOST RIVER				
13E5	I	Fairview Guard Station	27	12N	26E	6750
13E10S	I	Hilts Creek	15	8N	25E	8000
13E3	I	Lost-Garfield	3	11N	26E	6600
13E6S	I	Moonshine	31	13N	26E	7440
13E4	I	Sawmill Canyon	17	12N	26E	7000
13E7	I	Wet Creek Summit	15	8N	25E	7680
		BIG LOST RIVER				
13F3S	I	Bear Canyon	22	5N	21E	7900
13F2	I	Copper Basin	26	6N	21E	7640
13F20	I	Dry Fork	23	3N	23E	7220
13F8	I	Fishpole Lake	28	4N	22E	9300
13F11	I	Iron Bog	23	4N	22E	7650
13F12	I	Leadbelt	34	4N	23E	6700
14F3S	I	Lost Wood Divide	25	6N	18E	7900
14F2S	I	Stickney Mill	9	6N	19E	7430
		BIG WOOD RIVER				
15F9	I	Camas Creeks Divide	11	2S	9E	5710
15F15	I	Chimney Creek	9	1N	12E	6400
14F8S	I	Dollarhide Summit	9	3N	15E	8420
14F1	I	Galena	4	6N	15E	7440
14F6S	I	Galena Snotel	4	6N	15E	7470
14F12S	I	Galena Summit	7	6N	15E	8780
14F5	I	Graham Ranch	10	5N	17E	6270
14F16S	I	Hyndman Creek	2	4N	19E	7440
14F7	I	Mascot Mine	8	4N	20E	7780
14F9	I	Mount Baldy	23	4N	17E	8920
14F11	I	Soldier Ranger Station	29	2N	14E	5740
		LITTLE WOOD RIVER				
13F4S	I	Garfield Ranger Station	11	3N	21E	6560
13F5	I	Muldoon	26	3N	21E	6320
13F9RS	I	Swede Peak	4	3N	21E	7640
		FISH CREEK				
13F10	I	Iron Mine Creek	33	3N	23E	6300
13F6	I	Telfer Ranch	7	2N	23E	5840
		BOISE RIVER				
15F4S	I	Atlanta Summit	23	5N	10E	7580
15F2	I	Bad Bear	35	7N	6E	4940
16F4	I	Bogus Basin Road	32	5N	3E	5540
		BOISE RIVER (cont.)				
14F10	I	Couch Summit	9	2N	14E	6840
16F1	I	Deadman Gulch	29	7N	4E	5600
15F14SR	I	Graham Guard Station	9	7N	10E	5690
15E9S	I	Jackson Peak	7	8N	9E	7070
15F1SR	I	Moores Creek Summit	19	7N	7E	6100
15F6S	I	Prairie	13	2N	7E	4800
15F3	I	Road Creek	5	5N	8E	5380
15F5SR	I	Trinity Mountain	6	3N	9E	7770
		CANYON CREEK				
15F7S	I	Bennett Mountain	7	2S	9E	6560
15F12	I	Little Camas Flat	21	1S	9E	4940
		PAYETTE RIVER				
15E11S	I	Banner Summit	11	11N	10E	7040
16F2	I	Bogus Basin	16	5N	3E	6340
15E8SR	I	Cozy Cove	17	11N	7E	5380
15E3	I	Crawford Ranger Station	21	14N	4E	4860
15E10	I	Deadwood Airstrip	8	11N	7E	5360
15E4S	I	Deadwood Summit	13	14N	7E	6860
15E1	I	Lake Fork	3	18N	4E	5290
16E1	I	Rock Flat Summit	1	18N	2E	5310
15D1S	I	Secesh Summit	4	21N	4E	6520
15D2	I	Squaw Meadow	17	21N	4E	5900
16E3	I	Tripod Summit	17	11N	3E	5260
		WEISER RIVER				
16D1	I	Boulder Creek	16	20N	1W	5440
16E2	I	Placer Creek	15	17N	3W	5860
16E5S	I	Squaw Flat	32	17N	2E	6240
16D8S	I	West Branch	15	20N	1W	5560
		MANN CREEK				
6E10S	I	Bear Saddle	29	15N	5W	6180
16E9	I	Mann Creek	20	15N	5W	6080
17E1	I	Robinson Creek Ridge	2	14N	6W	6220
16E8	I	Sturgill Ridge	28	15N	5W	6680
17E2	I	Thorson Cabin	12	14N	6W	5320

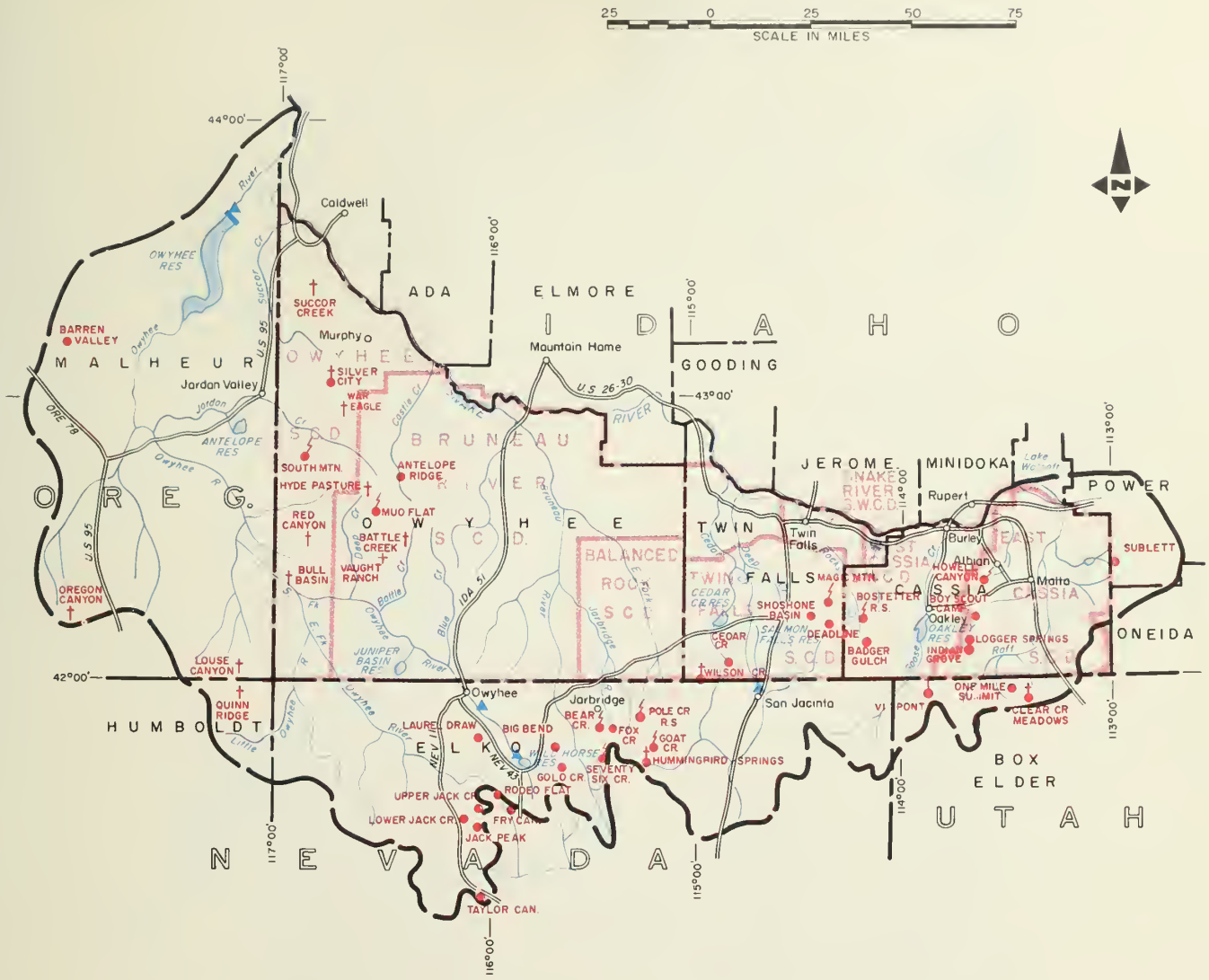
LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

USDA-SCS-PORTLAND, OR 1980 M7-OL-22023-2

MIDDLE SNAKE RIVER BASIN SOUTHSIDE



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry
- County Boundary
- Forcast Point
- Snow Course
- Snow Course and SNOTEL Site
- Aerial Snow Depth Gage

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INDEX to SNOW COURSES

MIDDLE SNAKE RIVER BASIN
SOUTHSIDE

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elevation
		RAFT RIVER				
13G2	I	Boy Scout Camp	8	14S	24E	7740
13H2	U	Clear Creek Meadows	26	14N	14W	9420
13G1S	I	Howell Canyon	2	13S	24E	7980
13G4	I	Indian Grove	14	15S	23E	7560
13G3	I	Logger Springs	2	15S	23E	8120
13H1	U	One Mile Summit	17	14N	14W	7330
12G8	I	Sublett	17	12S	30E	5950
		GOOSE - TRAPPER CREEK				
14G3	I	Badger Gulch	24	15S	19E	6660
14G1S	I	Bostetter Ranger Station	35	14S	19E	7500
13H3A	U	Vi Pont	17	14N	17W	7670
		SALMON FALLS CREEK				
14G5	I	Cedar Creek	26	15S	13E	6800
14G4	I	Deadline	25	14S	18E	6900
15H13S	N	Goat Creek	31	46N	60E	8880
14G2S	I	Magic Mountain	25	14S	18E	6880
14G6	I	Shoshone Basin	24	14S	17E	5810
15G2	I	Wilson Creek	24	16S	12E	7500
		BRUNEAU RIVER				
15H1S	N	Bear Creek	31	46N	58E	8040
15H2	N	Fox Creek	33	46N	58E	6750
15H15	N	Hummingbird Springs	12	45N	59E	8870
15H14S	N	Pole Creek Ranger Station	13	46N	50E	8360
15H3S	N	Seventy-six Creek	6	44N	58E	7100
		OWYHEE RIVER				
16G6	I	Antelope Ridge	35	8S	1W	6140
18F5	O	Barren Valley	26	17S	38E	4200
16G9A	I	Battle Creek	10	11S	1E	5720
15H4	N	Big Bend	30	45N	56E	6700
16G10A	I	Bull Basin	29	12S	5W	5460
15H7	N	Fry Canyon	31	43N	54E	6700
15H5	N	Gold Creek	31	45N	56E	6600
16G5A	I	Hyde Pasture	31	8S	2W	5760
16H4	N	Jacks Peak	28	42N	53E	8420
16H5	N	Laurel Draw	20	45N	53E	6700
17G4A	O	Louse Canyon	27	40S	44E	6440
16H1M	N	Lower Jack Creek	18	42N	53E	6800
16G7S	I	Mud Flat	34	9S	2W	5730
17G5A	O	Oregon Canyon	9	40S	40E	6950
17H6A	N	Quinn Ridge	9	47N	41E	6300
16G11A	I	Red Canyon	32	11S	4W	6650
15H6M	N	Rodeo Flat	36	43N	53E	6800
16F3	I	Silver City	7	5S	3W	6400
16G1S	I	South Mountain	35	7S	5W	6500
16F6A	I	Succor Creek	25	3S	5W	6100
15H9M	N	Taylor Canyon	35	39N	53E	6200
16H2	N	Upper Jack Creek	9	42N	53E	7250
16G12A	I	Vaught Ranch	10	11S	1W	5950
16G13A	I	War Eagle	20	5S	3W	7280

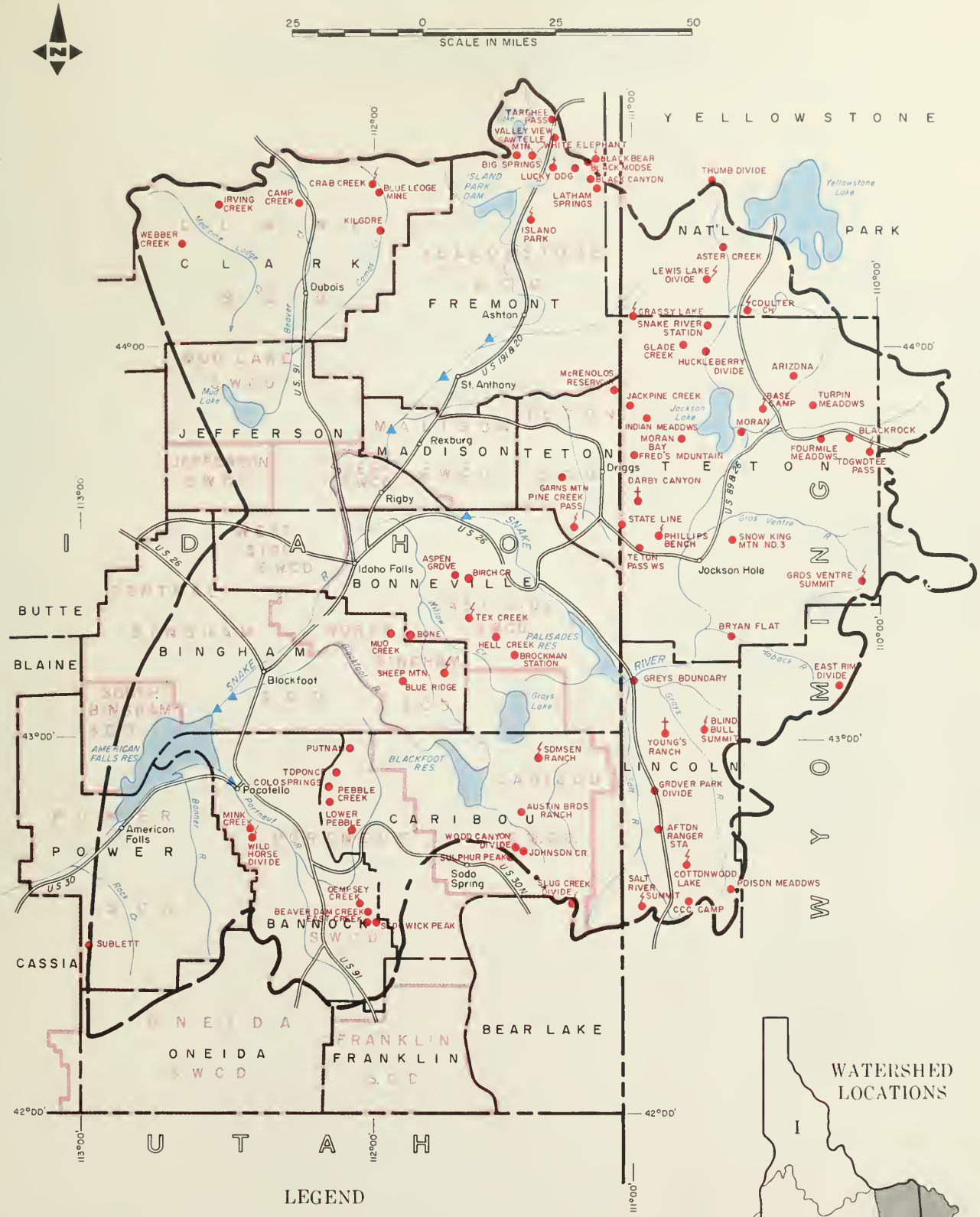
USDA-SCS-PORTLAND, OR 1980 M7-OL-22023-3

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

UPPER SNAKE RIVER BASIN



LEGEND

- Watershed Boundary
- Soil Conservation District Bdry.
- County Boundary
- Forecast Point
- Snow Course
- Snow Course and SNOTEL Site
- Aerial Snow Depth Gage

USDA-SCS-PORTLAND OR 1980 M7-QL-22023-4

INDEX to SNOW COURSES

UPPER SNAKE RIVER BASIN

No.	State	Name	Sec. / Lat.	Twp. or / And	Rge. / Long.	Elev
		SNAKE RIVER-WYOMING				
10G4	Wy	Afton Ranger Station	30	32N	118W	6200
10F1	Wy	Arizona	3	46N	115W	6850
10E8	Wy	Aster Greek	44°17'		110°38'	7700
10F2S	Wy	Base Gamp	20	46N	113W	6900
10F7S	Wy	Blackrock	4	44N	111W	8600
10G2S	Wy	Blind Bull	6	34N	115W	8750
10F14	Wy	Bryan Flat	9	38N	115W	6250
10G7	Wy	CGC Camp	9	29N	118W	7500
10G5S	Wy	Cottonwood Lake	25	31N	118W	7500
10E10S	Wy	Coulter Greek	44°09'		110°33'	7600
10F17	Wy	East Rim Divide	32	37N	111W	7950
10F6	Wy	Four Mile Meadows	35	45N	112W	7770
10E13	Wy	Glade Greek	12	48N	116W	7200
10F18	Wy	Greys Boundary	33	37N	118W	5800
10F19S	Wy	Gros Ventre Summit	36	40N	111W	8750
10G3	Wy	Grover Park Divide	27	33N	118W	7500
10E14	Wy	Huckleberry Divide	32	48N	115W	7300
10E9S	Wy	Lewis Lake Divide	44°13'		110°40'	7900
10F4	Wy	Moran	8 & 17	45N	114W	6800
10F3	Wy	Moran Bay	14	45N	116W	6800
10G6	Wy	Poison Meadows	29	30N	116W	8500
10G8S	Wy	Salt River Summit	32	29N	118W	7900
10E12	Wy	Snake River Station	9	48N	115W	6780
10F20	Wy	Snow King Mountain #3	4	40N	117W	7600
10E7	Wy	Thumb Divide	44°22'		110°35'	7900
10F9S	Wy	Togwotee Pass	29	44N	110W	9600
10F5	Wy	Turpin Meadows	14	45N	112W	6930
10G1A	Wy	Young's Ranch	26	34N	116W	6530
		HENRY'S FORK RIVER				
11E9S	I	Big Springs	4	13N	44E	6400
11E35S	M	Black Bear	27	15S	5E	7950
11E18	I	Black Canyon	11	13N	45E	7960
11E19	I	Black Moose	33	14N	45E	8160
10E15S	Wy	Grassy Lake	6	48N	117W	7230
11E10S	I	Island Park	28	13N	43E	6290
11E16	I	Latham Springs	9	13N	45E	7630
11E14	I	Lucky Dog	2	13N	44E	6860
11E32	I	Sawtell Mountain	7	14N	43E	8720
11E34	I	Targhee Pass	32	16N	44E	6980
11E8	I	Valley View	12	15N	43E	6680
11E36	I	White Elephant	17	14N	43E	7710
		TETON RIVER				
10F21	Wy	Darby Ganyon	28	43N	118W	8250
10F22	Wy	Freds Mountain	12	44N	118W	8150
11F13	I	Garns Mountain	20	4N	44E	8300
10F25	Wy	Indian Meadows	31	46N	117W	8240
10F26	Wy	Jackpine Greek	15	46N	118W	7350
11F12	I	McRenolds Reservoir	5	7N	46E	6720
10F23S	Wy	Phillips Bench	43°31'		110°55'	8200
11F2	I	Pine Creek Pass	24	3N	44E	6810
11F1	I	State Line	32	3N	46E	6660
10F13	Wy	Teton W.S.	43°30'		110°59'	7740

No.	State	Name	Sec. / Lat.	Twp. or / And	Rge. / Long.	Elev
		CAMAS-BEAVER CREEK				
11E11	I	Blue Ledge Mine	21	13N	38E	6900
12E3	I	Camp Greek	21	13N	36E	6580
11E17S	I	Crab Creek	21	13N	38E	6860
11E12	I	Kilgore	6	12N	39E	6200
		MEDICINE LODGE CREEK				
12E4	I	Irving Creek	20	13N	33E	7035
12E5	I	Webber Creek	23	12N	32E	6700
		WILLOW CREEK				
11F10	I	Aspen Grove	36	2N	41E	6500
11F3	I	Birch Creek	36	2N	41E	6800
11F8	I	Bone	29	1S	40E	6200
11F16	I	Brockman Station	19	2S	43E	6430
11F15	I	Hell Greek	27	1S	42E	7350
11F14	I	Mud Creek	4	2S	39E	7100
11F11SR	I	Sheep Mountain	30	2S	41E	6570
11F5SR	I	Tex Greek	36	1N	41E	6650
		BLACKFOOT RIVER				
11G3	I	Austin Brothers Ranch	28	7S	43E	6400
11F17	I	Blue Ridge	35	2S	39E	6780
11G22	I	Johnson Greek	4	9S	43E	6730
11G5S	I	Slug Creek Divide	15	10S	44E	7225
11G1S	I	Somsen Ranch	25	5S	43E	7000
11G19	I	Sulphur Peak	8	9S	43E	7070
11G23	I	Wood Canyon Divide	5	9S	43E	7450
		FORT PORTNEUF RIVER				
12G7	I	Beaverdam Greek	22	10S	38E	6120
12G16	I	Cold Springs	15	7S	37E	7000
12G5	I	Dempsey Greek	18	10S	38E	6100
11G24	I	East Creek	26	10S	38E	7000
12G6	I	Lower Pebble	7	8S	38E	5780
12G1	I	Mink Greek	33	7S	34E	6410
12G2	I	Pebble Creek	34	7S	37E	6550
12G14	I	Putnam	2	6S	37E	7220
11G17	I	Sedgwick Peak	30	10S	39E	7850
12G15	I	Toponce	23	6S	37E	6160
12G17S	I	Wildhorse Divide	4	8S	34E	6490

LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage

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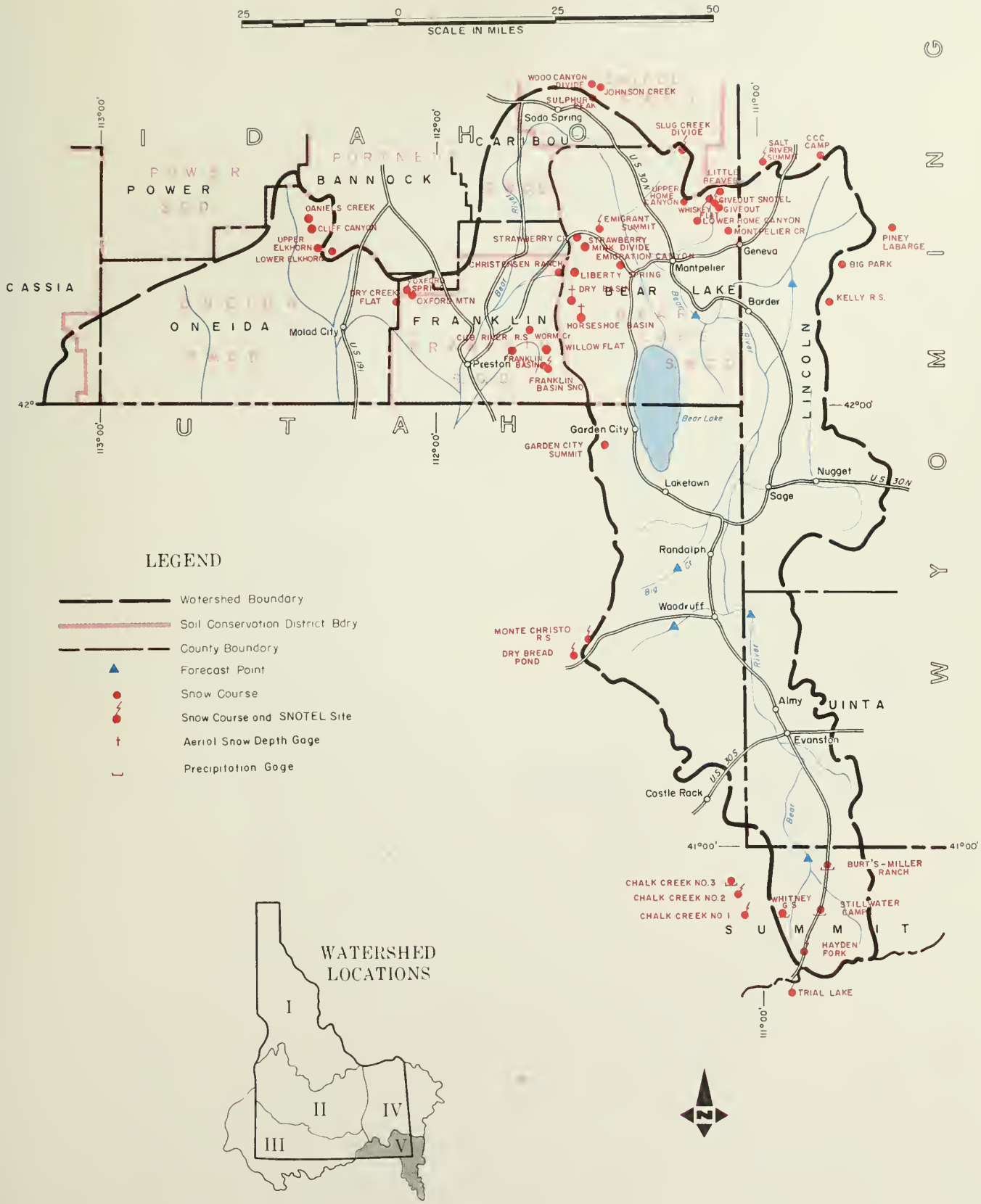
GREAT BASIN



USDA-SCS-PORTLAND OR 1980 M7-OL-22021

INDEX to SNOW COURSES

GREAT BASIN

No.	State	Name	Sec. / Lat.	Twp. or And	Rge. / Long.	Elevation
		BEAR RIVER				
10G11	Wy	Big Park	7	27N	117W	8700
11H13P	U	Dry Bread Pond	19	8N	4E	8230
11G7	I	Emigration Canyon	24	12S	42E	6500
11H7P	U	Garden City Summit	35	14N	4E	7600
10J6P	U	Burts-Miller Ranch	19	3N	10E	7900
10J7P	U	Hayden Fork	1	1S	9E	9300
10G12	Wy	Kelly Ranger Station	13	26N	118W	8200
11H12P	U	Monte Cristo R. S.	3	8N	4E	8960
10G10	Wy	Piney LaBarge	19	29N	114W	8820
10J17P	U	Stillwater Camp	32	2N	10E	8550
10J28P	U	Whitney G. S.	4	1N	9E	9300
		MONTPELIER CREEK				
11G16	I	Giveout	2	12S	45E	6840
11G25S	I	Giveout Snotel	2	12S	45E	6930
11G20	I	Little Beaver	27	11S	45E	6970
11G27	I	Lower Home Canyon	17	12S	45E	7640
11G18	I	Montpelier Creek	14	12S	45E	6540
11G26	I	Upper Home Canyon	31	11S	45E	8560
11G21	I	Whiskey Flat	26	11S	45E	6960
		MINK CREEK				
11G11	I	Christensen Ranch	27	13S	41E	5560
11G14A	I	Dry Basin	30	13S	42E	7820
11G6S	I	Emigrant Summit	21	12S	42E	7390
11G15A	I	Horseshoe Basin	31	13S	42E	8000
11G13	I	Liberty Spring	7	13S	42E	8600
11G9	I	Strawberry Creek	9	13S	41E	5820
11G10	I	Strawberry Mink Divide	14	13S	41E	6720
		CUB RIVER				
11G12	I	Cub River Ranger Station	9	15S	41E	5450
11G8	I	Franklin Basin	1	16S	41E	8040
11G2S	I	Franklin Basin Sno	7	16S	42E	8170
11G4	I	Willow Flat	11	15S	41E	6070
11G28	I	Worm Creek	28	14S	41E	6620
		MALAD RIVER				
12G13	I	Cliff Canyon	13	12S	35E	7200
12G12	I	Daniels Creek	11	12S	35E	6270
12G4	I	Dry Creek Flat	33	13S	37E	6360
12G11	I	Lower Elkhorn	30	12S	36E	6960
12G3	I	Oxford Mountain	27	13S	37E	6800
12G18S	I	Oxford Spring	27	13S	37E	6740
12G10	I	Upper Elkhorn	25	12S	35E	7140

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LEGEND

Numbering System (example)

10J7	Snow course only
10J7A	Snow course and/or aerial marker
10J7S	Snow course and snotel site
10J7R	Radioactive gage
10J7P	Precipitation gage

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WATER SUPPLY OUTLOOK FOR IDAHO

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Water Supply Outlook For Idaho

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Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
MAY 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the some location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

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Issued by

NORMAN A. BERG
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR MAY 1, 1981

In general, 1981 water supplies are expected to be adequate on watersheds having storage facilities and in those areas utilizing supplemental water from ground water pumping. Shortages can be expected on many small drainages without storage with diversions direct from stream channels.

Runoff is forecast to be below to well below normal statewide, ranging from lows of 35-45 percent of average for all drainages south of the Snake River to a high of near 70 percent of normal in the extreme northern portion of the state. In the central part of the state the Big Lost River watershed appears to be in the best condition and is forecast to flow near 70 percent of normal during the spring and summer runoff season.

April weather brought much needed precipitation to many areas of Idaho. A storm on Easter brought an inch or more rain to a large area from southwestern Idaho eastward along the Snake River.

Elsewhere in Idaho precipitation averages were well above normal except for a small area in the central mountains.

Temperature across Idaho averaged within a couple degrees of average during April.

The mountain snowpack, deficient throughout the winter, is melting at a normal rate, aided by normal temperatures and spring rains even at high elevations.

Water users should practice good water management, conserving as much water as possible for carryover into the 1982 season. If the winter of 1981-82 has a deficient snowpack in conjunction with the below normal runoff expected in 1981, a very serious drought will be experienced in 1982.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter April 1981		Fall - Winter Nov. 80 - April 81	
	Observed	Departure 2/	Observed	Departure 2/
Kootenai, Canada & U.S.	1.95	+ 0.33	16.47	+ 1.46
Flathead	1.71	+ 0.07	11.51	- 0.86
Clark Fork	1.16	- 0.17	7.63	- 1.70
Pend Oreille-Spokane	3.10	+ 1.28	18.22	- 1.15
Upper Snake	1.78	- 0.01	8.73	- 3.17
Snake River Plain	1.67	+ 0.68	5.78	- 0.29
Salmon-Payette-Boise	1.61	+ 0.18	13.21	- 0.01
Clearwater	2.73	- 0.39	18.20	- 2.80
Owyhee-Malheur	0.95	+ 0.20	6.30	- 0.12

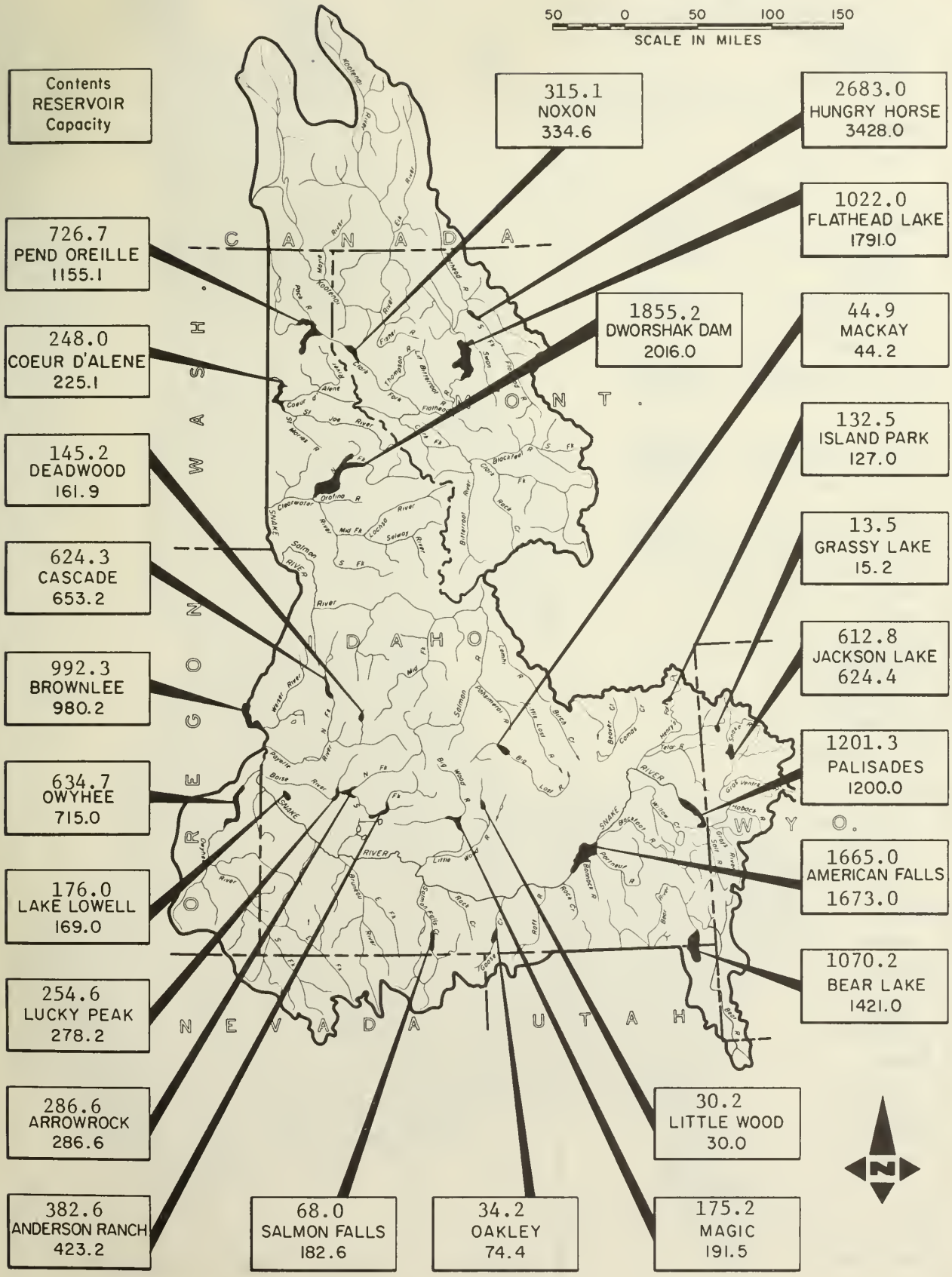
1/ Preliminary analysis and data by the National Weather Service and Meterological Service of Canada.

2/ Departure from 15-year (1963-1977) drainage division average.

RESERVOIR STORAGE

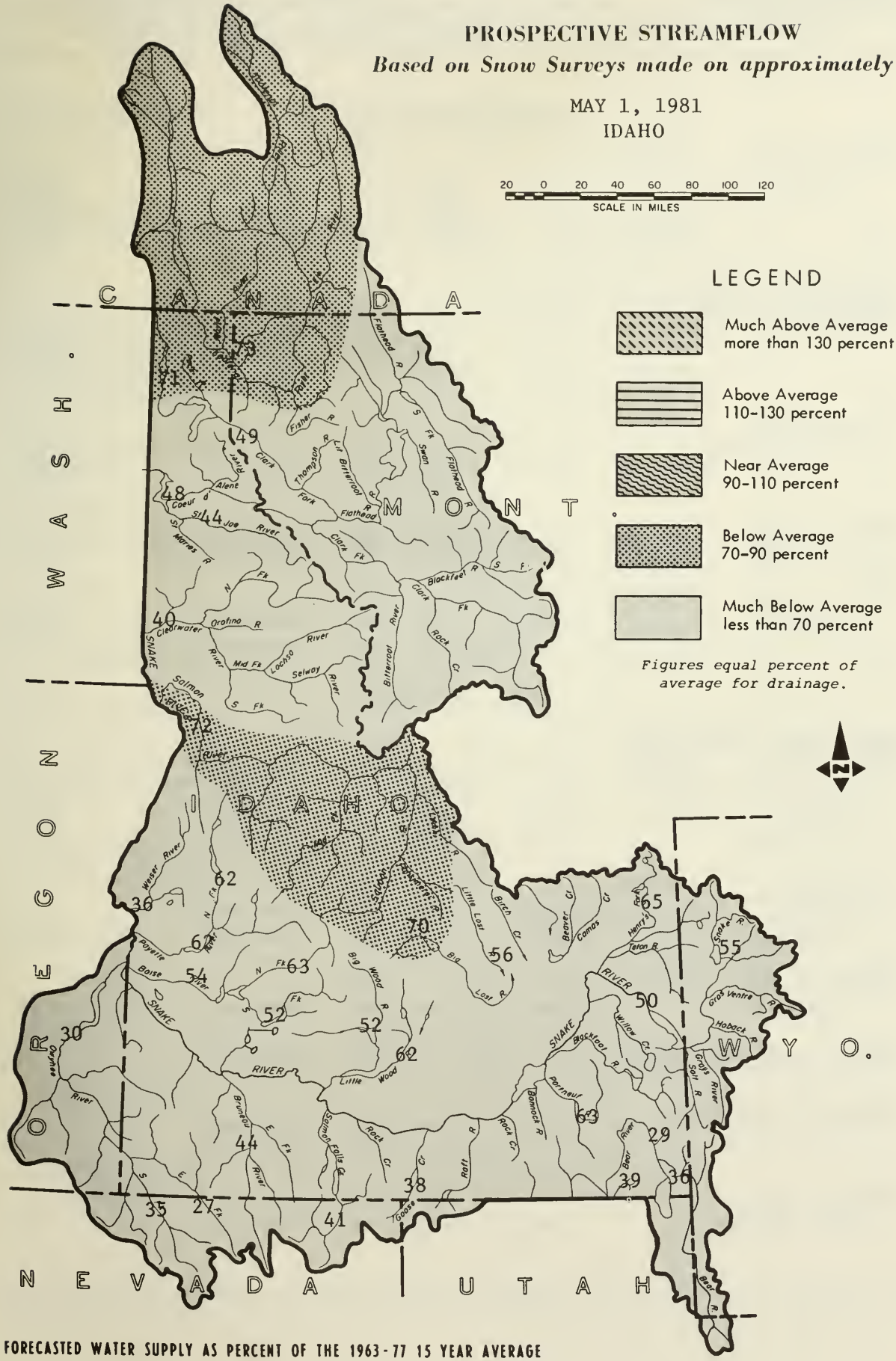
USABLE CONTENTS (1,000 Acre Feet)

MAY 1, 1981



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2683.0	2428.0	1896.0
Flathead	1791.0	1022.0	953.2	915.3
Pend Oreille	1155.1	726.7	435.9	483.0
Noxon	334.6	315.1	289.6	141.7
Spokane				
Coeur d'Alene	225.1	248.0	264.5	238.4
SNAKE BASIN				
Snake				
Jackson Lake	624.4	612.8	553.4	572.3
Palisades	1200.0	1201.3	941.4	666.3
American Falls	1673.0	1665.0	1669.1	1488.4
Island Park	127.0	132.5	139.8	126.3
Grassy Lake	15.2	13.5	12.3	11.1
Brownlee	980.2	992.3	786.9	406.4
Goose-Trapper Creeks				
Oakley	74.4	34.2	47.9	37.8
Salmon Falls Creek				
Salmon Falls	182.0	68.0	75.3	81.0
Big Lost				
Mackay	44.2	44.9	35.7	34.0
Big Wood				
Magic	191.5	175.2	125.8	172.7
Little Wood				
Little Wood	30.0	30.2	28.6	24.5
Fish Creek				
Carey Valley	14.4	12.3	12.9	--
Boise				
Anderson Ranch	423.2	382.6	317.0	289.3
Arrowrock	286.6	286.6	284.5	213.2
Lucky Peak	278.2	254.6	208.3	134.1
Lake Lowell (Deer Flat)	169.0	176.0	164.0	151.2
Owyhee				
Owyhee	715.0	634.7	700.0	591.2
Payette				
Cascade	653.2	624.3	405.0	330.9
Deadwood	161.9	145.2	83.3	98.2
Weiser				
Mann Creek	11.1	11.3	11.4	--
Clearwater				
Dworshak	2016.0	1855.2	1395.8	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1070.2	1116.1	1095.0



FORECASTED WATER SUPPLY AS PERCENT OF THE 1963-77 15 YEAR AVERAGE

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST[c] Thousand Acre Feet	THIS YEAR FORECAST[c] Percent of Average	THIS YEAR FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
UPPER COLUMBIA BASIN						
KOOTENAI RIVER						
Leonia	(at)	5980	73	May-Sep	--	8116
		5110	73	May-Jul	--	6966
		3890	72	May-Jun	--	5402
PEND OREILLE RIVER						
Clark Fork River						
Whitehorse Rapids	(at)	5940	49	May-Sep	--	12207
		5260	48	May-Jul	--	10945
		4380	48	May-Jun	--	9059
Priest River						
Priest River	(nr)	516	71	May-Sep	--	723
		613	73	Apr-Jul	--	841
SPOKANE RIVER						
Post Falls	(at)	975	48	May-Sep	--	2052
St. Joe River						
Calder	(at)	515	49	May-Sep	--	1053
		495	50	May-Jul	--	984
SNAKE RIVER BASIN						
SNAKE RIVER - MAIN STEM						
Moran	(at)	500	55	Apr-Sep	--	903
Palisades Inflow		2000	52	Apr-Sep	--	3863
Heise	(nr)	1900	50	May-Sep	--	3824
Blackfoot	(nr)	2195	53	May-Jul	--	4143
Henrys Fork						
Ashton	(nr)	410	65	May-Sep	--	634
Rexburg	(nr)	875	63	May-Sep	--	1387
Portneuf River						
Topaz	(at)	45	63	May-Sep	--	71
Oakley Reservoir Inflow		9	38	May-Sep	--	24
Salmon Falls Creek						
San Jacinto	(nr)	26	41	May-Sep	--	63
		24	41	May-Jul	--	58
Bruneau River						
Hot Springs	(nr)	80	44	May-Sep	--	183

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average +
Little Lost River						
Howe	(nr)	22	56	May-Sep	--	39
Wet Creek	(bl)	21	57	May-Sep	--	37
Big Lost River						
Howell Ranch	(at)	150	70	May-Sep	--	214
		100	70	May-Jun	--	144
Mackay	(nr)	130	68	May-Sep	--	191
Big Wood River						
Magic Reservoir		120	52	May-Sep	--	229
Inflow		110	52	May-Jul	--	213
Little Wood River						
Carey	(nr)	50	62	May-Sep	--	80
Boise River						
Twin Springs	(nr)	462	63	Apr-Sep	--	733
		426	63	Apr-Jul	--	676
Boise	(nr)	717	54	May-Sep	--	1326
South Fork						
Anderson Dam	(at)	320	52	Apr-Sep	--	621
Owyhee River						
Gold Cr., Nev.	(nr)	6	27	Apr-Jul	--	22
Owyhee, Nev.	(nr)	28	35	Apr-Jul	--	80
Lake Owyhee		67	30	May-Sep	--	224
net inflow		59	30	May-Jul	--	197
Payette River						
Horseshoe Bend	(nr)	975	62	May-Sep	--	1567
North Fork						
Cascade	(at)	297	62	May-Sep	--	480
Banks	(nr)	370	62	May-Sep	--	599
Weiser River						
Weiser	(nr)	98	36	May-Jul	--	276
Salmon River						
Whitebird	(at)	4730	72	May-Sep	--	6581
Clearwater River						
Spalding	(at)	2830	40	May-Sep	--	7081

(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT		THIS YEAR FORECAST [c] Thousand Acre Feet	THIS YEAR FORECAST [c] Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average †
GREAT BASIN						
BEAR RIVER						
Harer	(at)	98	36	May-Sep	--	271
Montpelier Creek						
Montpelier	(nr)	3.5	29	May-Sep	--	12
Cub River						
Preston	(nr)	19	39	May-Sep	--	49

(c) *Assuming normal meteorological conditions.*

† 1963-1977 period.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
						Water Content (inches)	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average
Above Burke		4100	4/29	14	4.6	6.3	19.7*
Atlanta Summit		7600	4/30	42	17.8	32.8	36.6
Bad Bear		4940	5/1	0	0.0	0.0	6.8
Banner Summit		7040	4/30	43	17.8	26.8	--
Bear Basin		5350	4/29	22	7.2	14.0	--
Bear Canyon		7900	4/30	31	12.8	17.4	18.9*
Bear Creek (A)	Nevada	8040	4/29	27	9.0	15.2	21.2*
Bear Mountain	Montana	5400	4/27	98	46.4	46.8	67.7*
Benton Meadow		2370	4/29	0	0.0	0.0	0.0*
Benton Spring		4920	4/29	16	6.5	4.0	16.7
Big Creek Summit		6580	4/29	61	25.0	39.7	37.8
Big Springs		6400	4/29	0	0.0	4.4	17.7
Blue Ridge		6780	4/29	0	0.0	--	--
Bogus Basin		6340	5/3	6	2.3	17.8	24.0*
Bogus Basin Raod		5540	5/3	0	0.0	0.0	0.4*
Bone		6200	4/29	0	0.0	--	--
Boulder Creek		5440	4/30	1	0.5	4.8	16.8
Breezy Saddle		5010	4/29	21	8.3	8.9	--
Brockman Station		6430	4/29	0	0.0	--	--
Brundage Mountain		7560	4/29	80	37.5	46.0	52.4*
Buck Meadows		5650	4/30	30	11.6	14.6	29.9*
Cayuse Airstrip		3500	4/30	0	0.0	0.0	1.0*
Chilco Ridge		3650	4/29	0	0.0	--	--
Conie Ridge		3900	4/29	0	0.0	--	--
Coolwater Mountain		6040	4/30	52	18.1	22.8	35.5*
Copper Basin		7640	4/30	0	0.0	5.6	8.5*
Copper Ridge		4820	4/30	0	0.0	--	25.7
Corner Creek		3150	4/29	0	0.0	--	--
Cozy Cove		5380	4/30	0	0.0	4.3	10.7*
Crater Meadows		5960	4/30	58	22.0	28.8	47.8
Crawford Ranger Station		4860	4/29	0	0.0	0.0	0.4
Crooked Fork		3610	4/30	0	0.0	0.0	3.5*
Cub River Ranger Station		5450	4/24	0	0.0	0.0	0.0
Darby Canyon	Wyoming	8250	5/1	0	0.0	--	25.5*
Deadline		6900	4/28	20	6.5	--	21.7*
Deadwood Airstrip		5360	4/30	0	0.0	5.4	8.6*
Deadwood Summit		6860	4/30	70	32.5	44.8	48.2*
Dollarhide Summit		8420	4/30	41	16.0	23.2	24.3*
Elk Butte		5550	4/29	22	8.1	11.4	34.1
Emigrant Summit		7390	4/30	9	3.3	19.4	24.9*
Fish Lake Airstrip		5650	4/30	49	20.1	30.3	41.4*
Forty-nine Meadows		4830	4/29	20	7.1	7.2	26.9
Fourth of July Summit		3200	4/30	0	0.0	--	0.8
Franklin Basin		8040	4/24	30	11.7	23.0	--
Freds Mountain	Wyoming	8150	4/30	32	11.3	14.3	21.1*
Galena		7440	4/29	16	6.2	10.7	15.9
Galena Summit		8780	4/29	46	18.0	21.2	26.9
Garfield Ranger Station		6560	4/30	0	0.0	2.2	2.6*
Gibbons Pass	Montana	7100	4/27	45	17.2	13.9	25.3
Giveout		6860	4/29	0	0.0	6.2	6.9*
Goat Creek	Nevada	8880	4/28	29	10.2	18.3	20.8
Goat Lake		6500	4/30	76	27.7	37.0	51.9*
Graham Guard Station		5690	4/30	0	0.0	4.7	--
Graham Ranch		6270	4/29	8	3.3	7.8	9.2*
Granite Peak		6000	4/29	66	23.1	28.5	47.6*
Grassy Lake	Wyoming	7265	4/29	38	17.2	23.5	36.4
Halverson Creek		4850	4/27	80	41.1	38.8	43.5*
Hell Creek (Lava Creek)		7350	4/29	0	0.0	--	--
Hemlock Butte		5810	4/30	57	21.0	26.6	52.4
Hilts Creek		8000	4/29	28	10.8	6.6	--
Hoodoo Basin	Montana	6000	5/4	77	33.4	44.0	55.6*
Hoodoo Creek	Montana	5900	5/4	68	30.1	39.8	52.0
Howell Canyon		7980	4/80	10	3.1	18.8	23.7*
Hyndman Creek		7440	4/30	11	4.6	--	--
Island Park		6290	4/28	0	0.0	0.0	11.4
Jackpine Creek	Wyoming	7350	5/1	17	6.5	9.9	24.1
Jackson Peak		7070	4/30	44	19.3	30.7	26.8*
Kellogg Peak (A)		5560	4/30	0	0.0	--	--
Kit Carson Pasture		4950	4/27	0	0.0	0.0	--
Lake Fork		5290	5/2	0	0.0	8.2	14.1*
Lemhi Pass	Montana	7480	5/3	0	0.0	0.0	9.2
Lemhi Ridge	Montana	8100	5/3	9	2.9	4.8	10.6*
Little Beaver		6970	4/29	0	0.0	7.9	11.4*

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE			THIS YEAR			PAST RECORD	
NAME		Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average
Lolo Pass		5240	4/30	22	9.3	17.1	31.4
Lookout		5140	4/29	37	14.2	17.4	35.4
Lost Lake		6110	4/29	82	31.4	34.7	62.5
Lost Wood Divide		7900	4/30	33	13.1	18.6	24.8*
Lower Home Canyon		7640	4/29	0	0.0	7.0	11.1*
Lower Sands Creek		3120	4/29	0	0.0	6.4	18.3
Magic Mountain		6880	4/28	21	8.5	9.1	18.8*
Mascot Mine		7780	4/30	20	7.4	13.3	15.5*
McRenolds Reservoir		6720	5/1	0	0.0	0.0	19.8*
Mill Creek Summit		8800	4/29	44	15.2	21.2	25.9
Mink Creek		6410	4/26	20	5.8	--	--
Montpelier Creek		6540	4/29	0	0.0	0.0	1.2*
Moonshine		7440	4/30	5	1.8	--	9.6*
Moores Creek Summit		6100	5/1	30	12.4	30.0	32.6
Moose Creek		6200	4/30	19	5.0	4.2	16.6*
Morgan Creek		7600	4/29	17	5.8	5.4	13.9
Mosquito Ridge (A)		5200	4/30	50	18.6	--	--
Mount Baldy		8920	4/29	49	17.8	21.4	23.6*
Mountain Meadows		6360	4/30	27	8.9	9.1	26.3*
Muldoon		6320	4/30	0	0.0	0.0	0.6*
Nez Perce Pass	Montana	6570	4/27	17	6.3	4.8	17.4
Packsaddle Springs		8200	5/1	34	14.6	--	--
Phillips Bench		8200	4/27	50	18.4	23.7	31.5*
Pierce Ranger Station		3080	5/1	0	0.0	0.0	1.9
Pine Creek Pass		6810	4/30	0	0.0	0.0	14.8
Pole Creek Ranger Station		8360	4/28	36	13.7	18.6	25.8*
Rammel Ridge		8240	5/1	45	20.0	--	--
Rock Flat Summit		5310	4/29	15	5.8	12.8	17.9
Roland Summit		5120	4/30	6	2.3	--	--
Sage Creek Saddle		4080	4/29	0	0.0	--	--
Savage Pass		6170	4/30	43	17.3	18.6	29.3*
Sawmill Canyon		7000	4/30	0	0.0	--	3.8*
Sawtell Mountain		8720	4/29	64	26.9	33.5	37.1*
Schweitzer Bowl		4800			Plowed Out		
Schweitzer Ridge		6200	5/1	66	30.4	42.8	47.5*
Secesh Summit		6520	5/3	33	14.4	34.3	36.9*
Seventy-six Creek	Nevada	7100	4/30	0	0.0	0.0	4.7*
Shanghai Summit		4570	4/30	0	0.0	1.6	23.1
Sheep Mountain		6570	4/29	0	0.0	--	--
Sherwin		3200	4/30	0	0.0	0.0	7.2*
Slug Creek Divide		7230	4/29	0	0.0	7.9	17.0*
Smith Creek		4800	4/29	79	36.8	32.5	47.4
Somsen Ranch		6840	4/29	0	0.0	4.5	--
South Mountain		6500	4/30	0	0.0	9.2	7.1*
Squaw Flat		6240	5/2	15	5.8	--	--
Squaw Meadow		5900	5/3	32	14.5	36.4	36.1*
State Line		6660	4/30	0	0.0	0.0	10.7
Stickney Mill		7430	4/30	0	0.0	6.2	6.5*
Sunset (A)		5540	4/30	58	22.3	--	--
Swede Peak		7640	4/30	0	0.0	14.4	16.7*
Targhee Pass		6980	4/29	0	0.0	0.0	16.2*
Teton Pass W.S.	Wyoming	7740	4/27	41	15.8	17.4	28.9*
Tex Creek		6650	4/29	0	0.0	--	--
Trinity Mountain		7770	4/30	51	20.9	43.9	44.1*
Upper Home Canyon		8560	4/29	25	8.8	20.1	24.5*
Valley View		6680	4/29	T	T	0.0	14.5
Vienna Mine		8960	4/30	60	26.7	40.8	39.9*
Wet Creek Summit		7680	4/29	18	7.2	3.2	13.8*
Whiskey Flat		6960	4/29	0	0.0	0.0	4.5*
White Elephant		7710	4/29	31	12.5	15.7	--
Willow Flat		6070	4/24	0	0.0	2.3	5.5*

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.
(A) Aerial observation Water content estimated.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
- Forest Service
- ESCS Crop Reporting Service
- SEA Agricultural Research

U. S. Department of Commerce
- NOAA, National Weather Service

U. S. Department of the Interior
- Bonneville Power Administration
- Water and Power Resources Service
- Fish and Wildlife Service
- Water Resources Division, Geological Survey
- National Park Service
- Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

Other organizations and individuals furnish valuable information for snow survey reports. Their cooperation is gratefully acknowledged.

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SOIL CONSERVATION SERVICE
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Water Supply Outlook For Idaho

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SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
JUNE 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.

WATER SUPPLY OUTLOOK FOR IDAHO

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

NORMAN A. BERG
ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

Released by

AMOS I. GARRISON, JR.
STATE CONSERVATIONIST
SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED
DIRECTOR
IDAHO DEPARTMENT OF WATER RESOURCES

Report prepared by

JACK A. WILSON, Snow Survey Supervisor
GERALD A. BEARD, Asst. Snow Survey Supervisor
KATHERN G. WOOTTON, Statistical Assistant

SOIL CONSERVATION SERVICE
SNOW SURVEY SECTION
ROOM 345, 304 N. 8th. ST.
BOISE, IDAHO 83702

WATER SUPPLY OUTLOOK for IDAHO

GENERAL SUMMARY FOR JUNE 1, 1981

The water supply for Idaho is forecast as good for those areas having reservoir facilities. All major reservoirs except those south of the Snake River are full or have a surcharge. Streamflow during the summer and fall is expected to drop sharply and be below normal due to the deficient snow pack and accelerated spring melt. Water users obtaining supplies direct from streamflow, especially on small streams, can expect shortages to occur during the latter part of the season.

Snow course measurements near June 1, indicate a well below normal snowpack for this time of year. This is a continuation of the deficient conditions experienced during the entire winter. In general, well above average rainfall, even at high elevations, accelerated the snow melt and resulted in above normal runoff during the month of May.

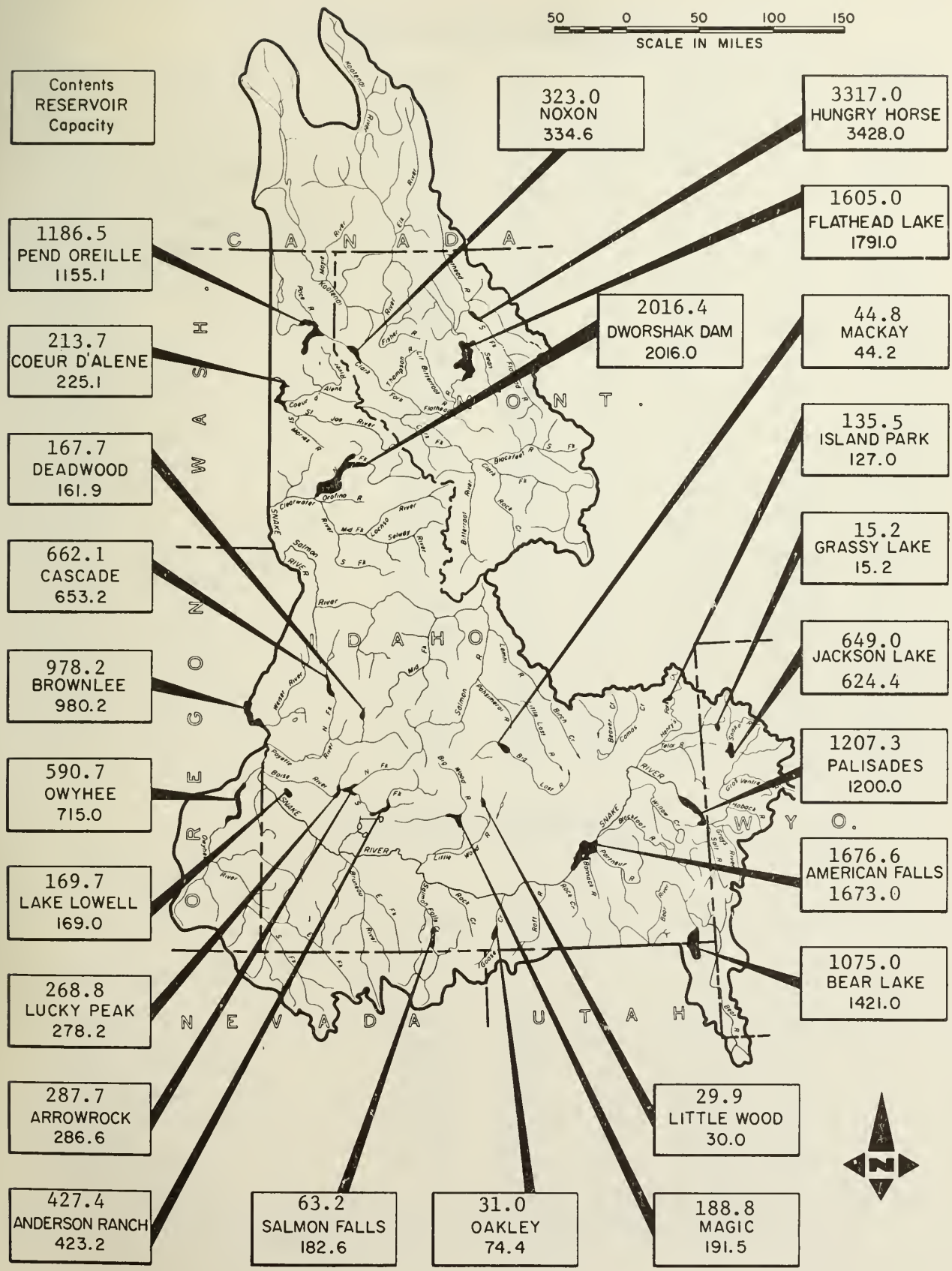
Valley precipitation during May, as reported by the U.S. Weather Service, continued a wet spring after a dryer than normal winter. Storms during the last half of the month pushed most stations' precipitation above normal for the month. Twin Falls reported a low of 67 percent of average while Ashton received 304 percent of normal. Temperatures across Idaho averaged just below normal for May.

Due to below normal runoff expected during 1981, water users should manage their supplies as efficiently as possible to provide carryover water in the reservoirs for 1982. A below normal snowpack during the winter of 1981-82 would result in severe shortages next year unless reserves are provided for in the reservoirs.

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JUNE 1, 1981



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average ½

JUNE 1, 1981 MEASUREMENTS

Atlanta Summit	7600	5/29	14	6.8	21.4	20.5*
Big Creek Summit	6580	5/28	23	10.5	22.8	18.6
Breezy Saddle	5010	5/29	0	0.0	--	--
Brundage Mountain	7560	6/1	38	18.2	31.8	36.9*
Coolwater Mountain	6040	5/29	13	5.2	--	16.4*
Crater Meadows	5960	5/29	15	8.0	--	32.0*
Crawford Ranger Station	4860	5/28	0	0.0	0.0	--
Deadwood Summit	6860	5/29	28	14.8	--	--
Elk Butte	5550	5/29	0	0.0	--	10.7*
Freds Mountain Wyo.	8150	5/29	13	4.8	T	--
Galena	7440	5/28	0	0.0	0.0	2.6*
Galena Summit	8780	5/28	23	10.3	13.0	13.9*
Goat Lake	6500	5/29	42	17.1	--	36.8*
Graham Ranch	6270	5/28	0	0.0	0.0	--
Granite Peak	6000	5/29	25	9.4	--	31.5*
Hemlock Butte	5810	5/29	8	3.3	--	30.9*
Jackson Peak	7070	5/29	9	4.4	--	11.9*
Lake Fork	5290	5/28	0	0.0	0.0	--
Lookout	5140	5/29	0	0.0	0.0	15.0*
Lost Lake	6110	5/29	38	16.2	--	46.4*
Moores Creek Summit	6100	5/29	0	0.0	12.6	12.5
Pine Creek Pass	6810	5/29	0	0.0	0.0	--
Schweitzer Ridge	6200	5/29	26	13.2	5.4	--
Secesh Summit	6520	5/28	0	0.0	11.2	--
Shanghai Summit	4570	5/29	0	0.0	--	--
Squaw Meadow	5900	5/28	0	0.0	10.4	15.3*
State Line	6660	5/29	0	0.0	0.0	--
Trinity Mountain	7770	5/29	19	9.5	29.7	25.7*
Vienna Mine	8960	5/29	38	17.5	30.7	29.4*

SUPPLEMENTAL MEASUREMENTS

DECEMBER 15, 1980

Island Park	6290	12/16	19	4.3	--	--

JANUARY 15, 1981

Bad Bear	4940	1/19	12	3.7	10.0	--
Bogus Basin	6340	1/19	16	4.7	--	--
Bogus Basin Road	5540	1/19	0	0.0	--	--
Crooked Fork	3610	1/14	6	2.0	--	--
Fish Lake Airstrip	5650	1/15	23	8.2	--	--
Galena	7440	1/14	27	8.2	--	--
Galena Summit	8780	1/14	29	8.8	--	--

(b)1963-77, 15 year period. #Not located directly on this drainage. ½ Estimated 1963-77 15 year Average. (A) Aerial observation Water content estimated (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches) Last Year	Water Content (inches) Average [b]

SUPPLEMENTAL MEASUREMENTS (Continued)

Hemlock Butte	5810	1/15	24	7.7	--	--
Lolo Pass	5240	1/14	20	6.4	--	--
Moores Creek Summit	6100	1/19	28	9.6	20.7	--
Savage Pass	6170	1/14	27	8.9	--	--
Shanghai Summit	4570	1/15	0	0.0	--	--
FEBRUARY 15, 1981						
Atlanta Summit	7600	2/13	44	13.6	25.7	--
Atlanta Townsite	5280	2/13	18	5.3	--	--
Bad Bear	4940	2/17	19	5.8	12.3	--
Bogus Basin	6340	2/17	29	7.5	--	--
Bogus Basin Road	5540	2/17	0	0.0	--	--
Crooked Fork	3610	2/17	13	4.8	7.2	--
Fish Lake Airstrip	5650	2/13	50	11.6	22.8	--
Galena	7440	2/12	39	11.1	--	--
Galena Summit	8780	2/12	44	12.4	--	--
Graham Guard Station	5690	2/13	26	8.2	12.5	--
Hemlock Butte	5810	2/13	55	14.4	25.6	--
Jackson Peak	7070	2/13	46	14.7	24.8	--
Lolo Pass	5240	2/17	44	10.8	21.0	--
Moores Creek Summit	6100	2/17	47	14.3	24.5	--
Shanghai Summit	4570	2/13	26	4.1	12.4	--
Trinity Mountain	7770	2/13	51	16.1	31.6	--
Vienna Mine	8960	2/13	53	15.5	29.7	--
MARCH 15, 1981						
Above Burke	4100	3/16	20	8.4	12.8	--
Atlanta Summit	7600	3/13	51	17.6	35.2	--
Atlanta Townsite	5280	3/18	11	4.2	--	--
Bad Bear	4940	3/16	13	4.3	12.6	--
Banner Summit	7040	3/16	55	18.8	--	--
Bogus Basin	6340	3/13	28	10.0	--	--
Bogus Basin Road	5540	3/13	0	0.0	--	--
Crooked Fork	3610	3/16	0	0.0	8.5	--
Elk Butte	5550	3/18	39	11.7	24.5	--
Fish Lake Airstrip	5650	3/17	61	17.1	30.9	--
Galena	7440	3/14	37	11.9	18.3	--
Galena Summit	8780	3/14	49	16.8	21.4	--
Graham Guard Station	5690	3/13	21	8.4	15.3	--
Hemlock Butte	5810	3/17	64	18.1	33.4	--
Jackson Peak	7070	3/13	52	18.2	34.2	--
Lolo Pass	5240	3/16	37	12.8	24.5	--
Lookout Pass	5140	3/16	46	17.2	24.8	--
Lost Lake	6110	3/18	84	27.2	37.5	--

(b) 1963-77, 15 year period. # Not located directly on this drainage. † Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
					Water Content (inches)	
NAME	Elevation	Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Last Year	Average b

SUPPLEMENTAL MEASUREMENTS (Continued)

Moores Creek Summit	6100	3/16	47	15.1	31.3	--
Prairie	4800	3/15	0	0.0	1.5	--
Savage Pass	6170	3/16	47	15.6	24.8	--
Shanghai Summit	4570	3/17	18	4.2	15.3	--
Sherwin	3200	3/16	0	0.0	6.5	--
Trinity Mountain	7770	3/13	56	21.3	43.7	--
Vienna Mine	8960	3/13	60	21.8	39.1	--
APRIL 15, 1981						
Atlanta Summit	7600	4/14	64	21.8	41.1	--
Bad Bear	4940	4/15	0	0.0	12.7	--
Bogus Basin	6340	4/15	42	15.7	--	--
Bogus Basin Road	5540	4/15	0	0.0	--	--
Crooked Fork	3610	4/14	0	0.0	--	--
Elk Butte	5550	4/15	60	18.2	--	--
Fish Lake Airstrip	5650	4/15	77	23.7	--	--
Galena	7440	4/14	38	15.3	20.1	--
Galena Summit	8780	4/14	59	19.7	27.0	--
Graham Guard Station	5690	4/14	17	6.5	16.5	--
Hemlock Butte	5810	4/15	87	27.4	--	--
Jackson Peak	7070	4/14	67	23.1	34.8	--
Lolo Pass	5240	4/14	53	17.9	--	--
Lookout Pass	5140	4/15	65	21.2	29.2	--
Lost Lake	6110	4/15	117	37.5	--	--
Moores Creek Summit	6100	4/15	57	20.2	37.6	--
Pierce Ranger Station	3080	4/15	0	0.0	--	--
Prairie	4800	4/15	0	0.0	0.0	--
Savage Pass	6170	4/14	68	21.3	--	--
Shanghai Summit	4570	4/15	26	8.3	--	--
Trinity Mountain	7770	4/14	74	27.7	50.2	--
Vienna Mine	8960	4/14	75	27.4	39.0	--
MAY 15, 1981						
Bogus Basin	6340	5/17	0	0.0	--	--
Bogus Basin Road	5540	5/17	0	0.0	--	--
Crater Meadows	5960	5/18	42	19.5	--	--
Elk Butte	5550	5/18	0	0.0	--	--
Galena	7440	5/12	0	0.0	--	--
Galena Summit	8780	5/12	38	13.4	16.3	--
Hemlock Butte	5810	5/18	41	16.3	--	--
Lookout Pass	5140	5/13	20	8.6	2.4	--
Lost Lake	6110	5/18	67	26.5	--	--
Moores Creek Summit	6100	5/19	6	2.6	22.3	--
Shanghai Summit	4570	5/18	0	0.0	--	--
Trinity Mountain	7770	5/19	39	18.3	36.9	--

(b) 1963-77, 15 year period. # Not located directly on this drainage. ¹ Estimated 1963-77 15 year average. (A) Aerial observation. Water content estimated. (SP) Pressure Pillow snow-water equivalent. (R) Radioactive Gage snow-water equivalent.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
- Forest Service
- ESCS Crop Reporting Service
- SEA Agricultural Research

U. S. Department of Commerce
- NOAA, National Weather Service

U. S. Department of the Interior
- Bonneville Power Administration
- Water and Power Resources Service
- Fish and Wildlife Service
- Water Resources Division, Geological Survey
- National Park Service
- Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

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